

162 South River Road

3088

SFR

TOWN OF SEWALL'S POINT BUILDING PERMIT

PARCEL CONTROL NUMBER _____

PERMIT NUMBER 3088
DATE ISSUED 11/7/91

OWNER Mr Paul K Hines
ADDRESS _____
CITY/ST/ZIP Palm City
TELEPHONE _____

CONTRACTOR OR OWNER/BLDR. Bronco Const Inc
ADDRESS P.O. Box 325 Port Salerno
CITY/ST/ZIP Port Salerno
TELEPHONE 286-4638

FLOOD ZONE B
TO BE CONSTRUCTED New house
SITE ADDRESS 162.5RR
SUBDIVISION Marguerita
CONSTRUCTION VALUE 150,000.00

Patrick 11-18-91
Patrick Exterminating Inc.
P.O. BOX 1784
HOBE SOUND, FL 33475
407-546-3722

162 So. River Rd
Patrick Exterminating, Inc.
P.O. BOX 1784
HOBE SOUND, FL 33475
407-546-3722

2-2-91

FEES

REMODELING/NEW CONSTRUCTION _____
IMPACT \$826.00
RADON \$24.50
SEPTIC 50.00
WELL _____
FENCE _____
POOL _____
DOCK _____

PLUMBING \$100.00
ELECTRICAL 100.00
MECH./A.C. 100.00
ROOF 100.00
WALL _____
POOL ENCLOSURE _____
OWNER/BUILDER _____
TOTAL \$2500
PAID BY CHECK 1316

BUILDING INSPECTION (SIGN OFF)

(FOR OFFICIAL USE ONLY)

FORM BOARD SURVEY <u>12/18/91 DB</u>	DATE	NAILING _____	DATE
ROUGH PLUMBING <u>slab OK</u>	DATE <u>11/20/92 DB</u>	ROOF <u>OK</u>	DATE <u>11/20/92 DB</u>
TERMITE PROTECTION <u>LS</u>	DATE <u>11-18-91</u>	INSULATION <u>OK</u>	DATE <u>11/22/92 DB</u>
FOOTING-SLAB <u>Footer OK</u>	DATE <u>11/11/91 DB</u>	FINAL ELECTRIC <u>OK</u>	DATE <u>4/14/92 DB</u>
LINTEL _____	DATE _____	FINAL PLUMBING <u>OK</u>	DATE <u>4/14/92 DB</u>
ROUGH ELECTRIC <u>OK</u>	DATE <u>11/20/92 DB</u>	SEPTIC FINAL _____	DATE _____
FRAMING <u>OK</u>	DATE <u>11/22/92 DB</u>	DRIVEWAY <u>OK</u>	DATE <u>4/6/92 DB</u>
A/C DUCTS <u>OK</u>	DATE <u>1/20/93 DB</u>	FINAL C.O. <u>OK</u>	DATE <u>4/14/92 DB</u>

PERMIT AUTHORIZED BY Dale Brown

- Call 287-2455 from 8:00 a.m. to 4:00 p.m. for inspections.
- Requests for inspections require 24 hours notice.
- All work must be in compliance with the Town of Sewall's Point ordinances, the South Florida Building Code, the State of Florida Energy Efficiency Building Code and Elevations based on the latest flood insurance rate map.
- Portable toilet facilities and haul-off trash container must be in job site before initial inspection.
- Working hours are from 8:00 a.m. to 5:00 p.m. Monday through Saturday.
- No trucks, trailers or other commercial vehicles may be left on job site overnight unless totally concealed. Violators will be cited. Questions regarding such equipment should be directed to the Building or Police Departments.

To obtain a permit the following are required:

1. Florida certification of builder and sub-contractors.
2. Certification of insurance from contractor or owner/builder re: liability and workers compensation.
3. Two sets of building plans which must include: a) 1/4" scale building drawings, b) plot plan, c) foundation plan, d) floor plans, e) wall and roof cross-sections, e) plumbing, electrical and air conditioning layouts, f) at least two elevations showing the height of building from finished floor. Plans must be sealed by a Florida registered architect or engineer.
4. Recorded warranty deed to the property.
5. Septic tank permit and one set of plans with Martin County Health Department seal.
6. Energy code calculations.
7. Tree removal permit (for trees other than nuisance trees)
8. Certification of elevation from licensed surveyor and determination of flood zone.
9. Amount of fill anticipated - rough sketch showing location of fill
10. Manufacturer's schedule of windows.

Owner Paul K. Hines & Anna M. Hines Current Address 2480 S.W. Danbury Ln.
 Telephone (407) 286-2513 Palm City, FL 34990

General Contractor Bronco Construction, Inc Address P.O. Box 325 Port Salerno
 Telephone (407) 286-4038

Where Licensed STATE 6020462 License Number _____
 Plumbing Contractor DYLEWSKI PLBG License Number _____
 Electrical Contractor HOFF License Number _____
 Roofing Contractor WILFRAM License Number _____
 A/C Contractor PERSONALIZED License Number _____

Describe the building or alterations New Construction - Residence

Name the street on which the building, its front building line and its front yard will face 162 S. River Road

Subdivision Marguerita Lot 12 Block _____

Building area (inside walls) 2,450 Garage, porch, carport area 910 S.F.

Contract Price (including Carpet, land, appliances, landscaping) \$ 150,000.00

Cost of Plans approved as submitted _____ as marked 150,000.00

In addition, the following are understood by owner and contractor 150,000

1. Building area inside walls must be a minimum of 1,500 square feet.
2. Building permit fees are \$5. per \$1,000. of the cost of the building, plus \$50. each for plumbing, electric, a.c. and roof. For example a \$1000. building x \$5. = \$500. plus \$200. (a.c., pl., el., roof) = \$700. cost of permit + \$365. impact fee = \$1,065 total. Also there is a charge of 1 cent per square foot for radon gas trust fund.
3. If no contract is submitted as proof of cost, the permit will be based on \$60. per square foot (inside walls) and \$25. per square foot (other areas). Owner-builder cost is 25% higher than the regular fee.
4. The Town has adopted the South Florida Building Code.
5. Building permits are issued for 2 years duration.
6. Construction must be started within 180 days or permit will be subject to revocation and forfeiture of fee.
7. ALL changes in plans must be approved by the Building Department.
8. Work hours are 8:AM to 5:PM Monday through Friday. NO SUNDAY WORK
9. Portable toilets must be on all construction sites.

10. Inspections are made Monday through Friday, 8:AM to Noon, 1:PM to 4:PM. 24 hour notice is required prior to all inspections.

11. String lines along property lines to facilitate set back inspections.

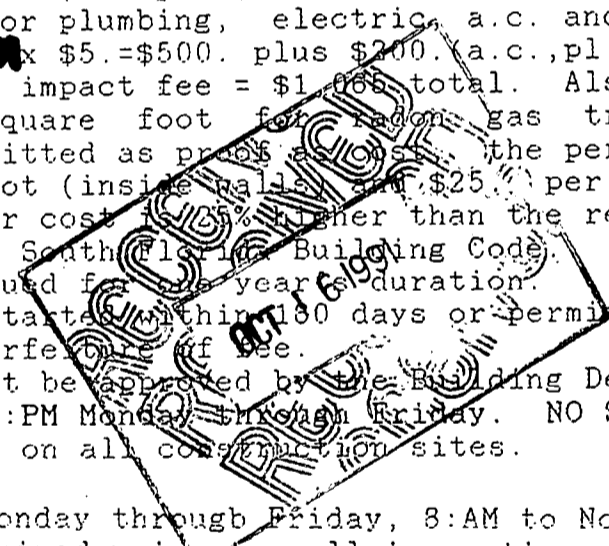
12. Before a certificate of occupancy is issued, the following are required:

- a. An owner's affidavit of building cost (form available). Any discrepancy between the original fee and final fee (based on affidavit) will be adjusted.
- b. Approval of septic tank installation by Martin Co. Health Dept.
- c. Rough grading and clean up of grounds.
- d. Affidavit from licensed surveyor showing slab elevation (if in "A" zone).
- e. An interim proprietary and general service fee will be charged to defray costs to the Town on newly improved property prior to imposition of ad valorem taxes on such property. Building Department will compute charge at time of c.o..

13. THIS SUMMARY IS NOT A SUBSTITUTE FOR TOWN ORDINANCES. APPROVAL OF THE BUILDING PLANS IN NO WAY RELIEVES THE OWNER OR CONTRACTOR FROM COMPLIANCE WITH TOWN ORDINANCES.

14. In addition to the requirements of this permit there may be additional restrictions applicable to this property that may be found in the public records of this county.

Contractor's Signature [Signature] Owner's Signature Paul K. Hines
 Approval by Building Inspector [Signature] Date 11/2/91
 Approval by Building Commissioner [Signature] Date 11/1/91
 Certificate of Occupancy issued _____ Date _____



3088

\$2,500

\$2450.00

Andon

Warranty Deed (STATUTORY FORM — SECTION 689.02 F.S.)

This Indenture, Made this 11 day of October 19 88, Between
JOSEPH A. SCHEPIS, a married man
of the County of Martin, State of Florida, grantor, and
PAUL HINES and ANNA M. HINES, his wife
whose post office address is 12829 Briarlake Drive, Apt. 102, Palm Beach Gardens,
Florida 33418
of the County of Palm Beach, State of Florida, grantee,

Witnesseth, That said grantor, for and in consideration of the sum of Ten and 00/100 (\$10.00)
Dollars,
and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby
acknowledged, has granted, bargained and sold to the said grantee, and grantee's heirs and assigns forever, the fol-
lowing described land, situate, lying and being in Martin County, Florida, to-wit:

Lot 12, MARGUERITA SUBDIVISION, according to the Plat thereof
recorded in Plat Book 10, Page 3, public records of Martin
County, Florida.

Subject to restrictions, reservations, easements and zoning
of record and taxes for the year 1989 and subsequent years.

This is vacant land and not homestead property to the Grantor
herein who permanently resides at 32 Rio Vista Drive, Stuart,
Florida.

and said grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims
of all persons whomsoever.

* "Grantor" and "grantee" are used for singular or plural, as context requires.

In Witness Whereof, Grantor has hereunto set grantor's hand and seal the day and year first above written.
Signed, sealed and delivered in our presence:

Handwritten signatures of witnesses: Christine L. Watts, Willie K. Watts

Handwritten signature of Joseph A. Schepis with seal lines (Seal)

STATE OF FLORIDA
COUNTY OF MARTIN
I HEREBY CERTIFY that on this day before me, an officer duly qualified to take acknowledgments, personally
appeared JOSEPH A. SCHEPIS, a married man

to me known to be the person described in and who executed the foregoing instrument and acknowledged before
me that he executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 11 day of October,
19 88.

My commission expires: 7/15/91 Notary Public

FLA. DOC. PAID
\$ 456.50
Marilyn Stiller
Clerk of Circuit Court
Martin Co., Fla.
By BU D.C.



4.2 GUARANTEED MAXIMUM PRICE (IF APPLICABLE)

4.2.1 The sum of the Cost of the Work and the Contractor's Fee is guaranteed by the Contractor not to exceed One Hundred Fifty Nine Thousand Six Hundred Thirty Eight & 88/100 Dollars (\$ 159,638.88), subject to additions and deductions by Change Order as provided in the Contract Documents. Such maximum sum is referred to in the Contract Documents as the Guaranteed Maximum Price. Costs which would cause the Guaranteed Maximum Price to be exceeded shall be paid by the Contractor without reimbursement by the Owner.

(Insert specific provisions if the Contractor is to participate in any savings.)

4.2.2 The Guaranteed Maximum Price is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:

(State the numbers or other identification of any accepted alternates, but only if a Guaranteed Maximum Price is inserted in Subparagraph 4.2.1. If decisions on other alternates are to be made by the Owner subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date until which that amount is valid.)

Permits	\$2,400	Oak flooring	6,250
Site clearing	2,000	Shelving	200
Fireplace, treatments	2,000	Electric fixtures	2,000
Tile	1,900	Ceiling fans	500
Shower enclosure	480	Landscape, sod irrigation system	4,000
Glass, mirrors	400		
Cabinets and formica tops	8,000		
Carpet	4,000		
Med. cabinets; bath accessor.	200		

4.2.3 The amounts agreed to for unit prices, if any, are:

(State unit prices only if a Guaranteed Maximum Price is inserted in Subparagraph 4.2.1.)

ARTICLE 5

COSTS TO BE REIMBURSED

5.1 The term "Cost of the Work" shall mean costs necessarily incurred by the Contractor in the proper performance of the Work. Such costs shall be at rates not higher than the standard paid at the place of the Project except with prior consent of the Owner. The Cost of the Work shall include only the items set forth in this Article 5.

5.1.1 Wages of construction workers directly employed by the Contractor to perform the construction of the Work, including welfare, unemployment compensation, social security and other benefits.

5.1.2 Costs, including transportation, of materials and equipment incorporated or to be incorporated in the completed construction. All discounts for cash or prompt payment shall accrue to the ~~contractor~~ Owner.

5.1.3 Payments made by the Contractor to Subcontractors in accordance with the requirements of the subcontracts.

[Handwritten signatures and initials]

910812

NOTICE OF COMMENCEMENT

Building Permit No. _____ Tax Folio No. 13-38-41-011-000-00120-9-0000

STATE OF FLORIDA

COUNTY OF MARTIN

(Do not write in this blank area.
Reserved for recording purposes only)

THE UNDERSIGNED hereby gives notice that improvements will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

1. Description of Property: Legal description of the property, and street address if available Lot 12 of MARGUERITA SUBDIVISION according to the Plat thereof recorded in Plat Book 10, Page 3, Public Records of Martin County, Florida.

STATE OF FLORIDA
COUNTY OF MARTIN

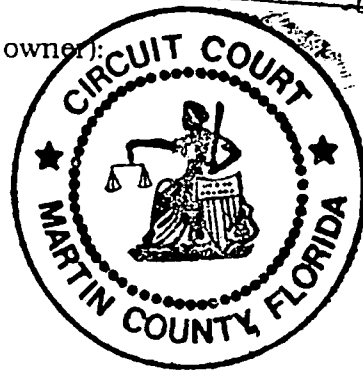
2. General Description of Improvements:
single family dwelling

THIS IS TO CERTIFY THAT THIS IS A
TRUE AND CORRECT COPY OF THE
ORIGINAL.

3. Owner Information:
a. Name and address: Paul K. and Anna M. Hines
2480 S.W. Danbury Lane
Palm City, Florida 34990
b. Interest in property: FEE SIMPLE
c. Name and address of fee simple titleholder (if other than owner):

MARSHA STILLER, CLERK
BY [Signature] D.C.
DATE 10-30-91

4. Contractor: (name and address) Bronco Construction, Inc.
Post Office Box 325
Port Salerno, Florida 34992



5. Surety:
a. Name and address:
b. Amount of bond \$ _____

6. Lender Information:
a. Name and address: SUN BANK/TREASURE COAST, National Association
2400 S. Federal Highway
Stuart, Florida 34994
b. Designated Contact: Douglas A. O'Brien

7. Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)7., Florida Statutes:
(name and address)

8. In addition to himself, Owner designates Larry M. Stewart, Esquire of Post Office Box 809, Stuart, FL, 34995 to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes.

9. Expiration date of Notice of Commencement (the expiration date is One (1) Year from the date of recording unless a different date is specified). Other expiration date: _____

PAUL K. HINES ANNA M. HINES
Owner's Name (Must be typed)
[Signature] [Signature]
Signature of Owner
PAUL K. HINES ANNA M. HINES

STATE OF FLORIDA
COUNTY OF MARTIN

Sworn to and subscribed before me, the undersigned authority, this 30th day of October, 19 91

[Signature]
(Name) Pamela A. Loedding
NOTARY PUBLIC (NOTARY SEAL)



**STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES
APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT**

Applicant Paul Hines

Permit Application Number HD 91-335

PART III - SITE EVALUATION INFORMATION

- Lot size appears to be as indicated on site plan: Yes No
- Anticipated sewage flow from Part I 450 GPD Authorized sewage flow 957 GPD
- Benchmark location Crown of Road
 (A) APPROX. AMOUNT OF FILL ON NEIGHBOR LOTS: 2 to 3 ft (B) IN SOIL PROFILE: 0
- Existing elevation (at time of site evaluation) of the proposed system site in relation to the benchmark is 7 inches above/below the benchmark.
- Proposed system distance to: Surface water N/A feet ___ feet ___ feet; Private potable wells N/A feet ___ feet ___ feet; Community public wells N/A feet ___ feet; Other public wells N/A feet ___ feet; Non-potable wells N/A feet ___ feet;
- Unobstructed area available for system installation 860 ft² ___ ft² ___ ft²
- Is lot subject to frequent flooding? Yes ___ No 10 year flood? Yes No
 If subject to a 10 year flood indicate: (a) the 10 year flood elevation in the area ~~31.7~~^{N/A} feet MSL
 (b) property elevation at proposed system location 5.9 feet MSL.

SOIL PROFILE - SAMPLE SITE 1

	COLOR	TEXTURE	DEPTH
4-1	Dark Gray	SAND	0" to 18"
7-1	light Gray	SAND	18" to 21"
8-1	White	SAND	21" to 50"
3-3	Dark Brown	SAND	50" to 56"
3-6	Dark yellowish Brown	SAND	56" to 72"
			" to "

SOIL PROFILE - SAMPLE SITE 2

	COLOR	TEXTURE	DEPTH
4-1	Dark Gray	SAND	0" to 12"
7-1	light Gray	SAND	12" to 18"
8-1	White	SAND	18" to 54"
3-3	Dark Brown	SAND	54" to 66"
4-4	Dark yellowish Brown	SAND	66" to 72"
			" to "

USDA Soil Series Name (if Known) Jonathan⁴¹ Sand USDA Soil Series Name (if Known) Jonathan⁴¹ Sand

USDA Soil texture classification on which drainfield size should be based med sand

Water table at time of evaluation 36 inches below/above existing grade

Estimated wet season water table 30 inches below/above existing grade

Type water table: Perched ___ Apparent

Is mottling found in the soil? Yes ___ No
At what depth? ___ Inches ___ Inches

Are vegetative species indicative of high water table? Yes ___ No ___
VEG. TYPE: saw palmetto, slash, zoea

For property with contiguous ditches:
Depth of ditches N/A inches ___ inches
Depth of water in ditches ___ inches ___ inches

Other findings: _____

Date of Site Evaluation 10-21-91

Evaluator's Signature [Signature]
(Include seal if performed by P.E.)



STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES
APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Authority: Chapter 381, FS
 Chapter 10D-6, FAC

Date of Application 10/18/91 Permit Application Number AD 91-335

-----PART I - APPLICATION-----

Name of Owner MR. PAUL HINES Telephone Number 298-1980
 Mailing Address of Owner C/O GUNSTER, YOKLEY 10 CENTRAL PKWY. STUART FL. 34997
 Owner's Agent BCLY, INC. Builder BRONCO CONST.
 Agent's Mailing Address P.O. BOX 1469 PALM CITY, FL 34990 Telephone No. 236-8083
 Property Street Address South River Rd.
 Lot No. 12 Block No. - Subdivision MARGARITA Date Subdivided 3-85

NOTE: IF NOT IN A SUBDIVISION ATTACH A METES AND BOUNDS DESCRIPTION

This Application is for: New System Repair _____ Existing System _____

Type of Establishment	Sewage Flow (Gallons per day)	Sewage Flow Based On
<u>Single Family Residence</u>	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

TOTAL FLOW = _____

Type of Residential	No. Bedrooms (each dwelling unit)	Heated or Cooled Area (each dwelling unit)	No. Dwelling Units	Sewage Flow (Gallons per day)
<u>FRAME Single Family</u>	<u>3</u>	<u>2450</u> ft ²	<u>1</u>	<u>600</u>
_____	_____	_____	_____	_____

Exact Directions to Property _____

AUDIT CONTROL NO. 134616 Applicant's Signature David W. Johnson



STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES
ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION AND INSTALLATION PERMIT

Authority: Chapter 381, FS
 Chapter 10D-6, FAC

Applicant _____

Permit Number _____

----- PART I - SYSTEM CONSTRUCTION SPECIFICATIONS AND CONSTRUCTION APPROVAL -----

Treatment Tank		Minimum Draintrench Size	OR	Minimum Absorption Bed Size
Septic tank or aerobic unit <u>1050</u> gallons	Grease interceptor <u>NA</u> gallons	_____ Square Feet		<u>100</u> Square Feet
Septic tank or aerobic unit _____ gallons	Dosing tank <u>NA</u> gallons	<u>NA</u> Square Feet		<u>NA</u> Square Feet
Graywater tank <u>NA</u> gallons		<u>NA</u> Square Feet		<u>NA</u> Square Feet
Laundry waste tank <u>NA</u> gallons		<u>NA</u> Square Feet		<u>NA</u> Square Feet

Other Requirements:

- (a) Installation must be in accord with requirements of chapter 10D-6, FAC.
- (b) A system construction permit is valid for a period of one calendar year from date of issue.
- (c) Final installation inspection and approval is required before the system is covered.
- (d) Invert of stub-out for None to be minimum 39" (date: 10/29/91) benchmark.
- Invert of stub-out for _____ to be _____ benchmark.
- Invert of stub-out for NA to be NA benchmark.
- Invert of stub-out for _____ to be _____ benchmark.

(e) Fill quality and quantity: Any fill used must meet 10D-6 FAC standards

(f) Other: no fill to be installed if base water quantity less

System design and specifications by: [Signature] Title NA
 Construction authorized by: [Signature] Date 10/29/91
[Signature] County Public Health Unit

Note: Completed copies of this form will be provided to the applicant, installer and the building department.

AUDIT CONTROL NO. 134818

RAW



STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

STUBOUT ELEVATION AND EXCAVATION CERTIFICATION

APPLICANT: Paul Hines SEPTIC TANK PERMIT NO. HD91-335

LEGAL DESCRIPTION: LOT 12 MARGARITA

The items which are checked off below must be certified by a surveyor or engineer and returned to the Martin County Health Unit prior to the first plumbing inspection by the Building Department.

- 1. Building Permit Number: _____ (Certification not required for this item).
- 2. I certify that the elevation of the top of the lowest plumbing stubout is _____ inches above benchmark elevation as indicated on septic tank permit.
- 3. I certify that the top of the lowest building plumbing stubout is _____ inches ^{above} ~~below~~ crown of road elevation shown on septic tank permit.
- 4. I certify that all severe limited soil has been removed from an area of _____ feet by _____ feet to a minimum depth of six (6) feet below top of required stubout elevation. Submit plot plan to scale of excavated area.

Date Observed: _____

5. I certify that the top of the drainfield pipe elevation is _____.

- NOTE:
- a. Severe limited soil includes but is not limited to hardpan, clay, silt, marl or muck.
 - b. Drainfield must be centered in the excavated area. Drainfield will not be approved if severe limited soils are not removed.

CERTIFIED BY: _____

As applicant or applicant's representative, I understand the above requirements.

Date: _____ Job Number: _____

Paul K. Hines
(Signature)

FOR MARTIN COUNTY PUBLIC HEALTH UNIT USE ONLY

Martin County Health Unit Approval Signature

(Date)

MARTIN COUNTY PUBLIC HEALTH UNIT
ENVIRONMENTAL HEALTH
612 SOUTH DIXIE HIGHWAY • STUART, FLORIDA 34994
Bob Martinez, Governor • Gregory L. Coler, Secretary

Revised 12-7-88



STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM

PERMIT NUMBER AD 91-335 HOME PHONE _____
NAME OF APPLICANT Paul Hines WORK PHONE 248-1980
MAILING ADDRESS OF APPLICANT Gunster, Yorkley, 10 Central Park, Stuart
ZIP CODE _____
LOT 12 BLOCK — SUBDIVISION MARGARITA
IF NOT SUBDIVIDED, ATTACH A COMPLETE LEGAL DESCRIPTION
PLAT BOOK 10 PAGE 3 DATE SUBDIVIDED MARCH 1985
RESIDENTIAL: NUMBER DWELLING UNITS 1 NUMBER BEDROOMS 3
LOT SIZE 16,640 ± FT² HEATED OR COOLED AREA OF HOME 2450 FT²
COMMERCIAL: TYPE OF BUSINESS PROPOSED _____
BUILDING SIZE _____

AFFIDAVIT

I HAVE REVIEWED THIS PERMIT AND I CERTIFY THAT ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT AND ANY APPLICABLE STATE OR COUNTY REGULATIONS.

SIGNATURE OF PROPERTY OWNER OR OWNER'S LEGALLY AUTHORIZED REPRESENTATIVE:

David W. Schym

-----INSTALLATION SPECIFICATIONS-----

SEPTIC TANK CAPACITY 1050 GALLONS
DRAINFIELD SIZE 500 SQUARE FEET 9' x 56'
DRAINFIELD ROCK MUST BE 11 FEET FROM FRONT OR REAR PROPERTY LINES
AND 9 FEET FROM SIDE PROPERTY LINES. EXCAVATION CAN NOT EXTEND MORE
THAN FIVE FEET FROM APPROVED INSTALLATION AREA.
TOP OF BUILDING STUB OUT IS REQUIRED TO BE A MINIMUM ELEVATION OF _____
TOP OF DRAINFIELD PIPE IS REQUIRED TO BE A MINIMUM ELEVATION OF _____
TOP OF SEPTIC TANK IS REQUIRED TO BE A MINIMUM ELEVATION OF _____

29" Below CRRD (el: 9.51/160) 19" Below CRRD 25" Below CRRD

* Drained to be installed 11" from front property line.

ISSUED BY: [Signature] DATE 10/29/91
MARTIN COUNTY PUBLIC HEALTH UNIT

PLEASE NOTE:

- (1) IF BUILDING CONSTRUCTION DOES NOT START WITHIN ONE YEAR FROM DATE OF ISSUANCE, THIS PERMIT EXPIRES. IF BUILDING CONSTRUCTION STARTS WITHIN 1 YEAR FROM DATE OF ISSUANCE, THE DATE OF EXPIRATION WILL BE EXTENDED AN ADDITIONAL 90 DAYS.
- (2) APPLICANT IS RESPONSIBLE FOR REPLACING EXCAVATED SOILS WITH A GOOD GRADE OF SAND.
- (3) N/A REINSPECTION FEE IF WELL NOT INSTALLED AT TIME OF ONSITE SEWAGE DISPOSAL SYSTEM INSPECTION.
- (4) INSPECTION RESULTS WILL BE POSTED ON BUILDING PERMIT OR ON ELECTRICAL BOX.
- (5) IF BUILDING STUBOUT IS PLACED MORE THAN 20 FEET FROM SEPTIC TANK OR DRAINFIELD, A HIGHER STUBOUT ELEVATION THAN SHOWN ABOVE WILL BE REQUIRED.
- (6) IF FILL IS REQUIRED, CONTACT MARTIN COUNTY BUILDING DIVISION.
- (7) IF ANY INFORMATION ON THIS PERMIT CHANGES, AN UPDATED APPLICATION IS REQUIRED.
- (8) IF WELL OR MOUND DRAINFIELD IS PROPOSED, SEE ATTACHED SKETCH OF ADDITIONAL SPECIAL REQUIREMENTS.

-----FINAL INSPECTION-----

CONSTRUCTION APPROVED BY: _____ DATE _____
MARTIN COUNTY PUBLIC HEALTH UNIT

AN APPROVED SYSTEM DOES NOT GUARANTEE PERFORMANCE

RECEIVED
OCT 18 1991

9207

MARTIN COUNTY PUBLIC HEALTH UNIT
131 EAST SEVENTH STREET • STUART, FLORIDA 34994



APPLICANT Paul Hines

LEGAL DESCRIPTION Lot 12, Plat of Margarita S/D/, PB 10, Pg 3, Martin County

-----SITE INFORMATION-----

1. IS THERE A SEPTIC SYSTEM OR OTHER INTERFERENCE WITHIN 75 FEET OF THE PROPOSED PRIVATE WELL? N/A No
2. IS THERE A POTABLE PRIVATE WELL WITHIN 75 FEET OF THE PROPOSED AVAILABLE AREA FOR THE PROPOSED SEPTIC SYSTEM? No
3. IS THERE AN IRRIGATION WELL WITHIN 50 FEET OF THE AVAILABLE AREA FOR THE PROPOSED SEPTIC SYSTEM? No
4. IS THERE A PUBLIC WELL THAT SERVES LESS THAN 25 PEOPLE OR LESS THAN 15 HOMES WITHIN 100 FEET OF THE PROPOSED SEPTIC SYSTEM? No
5. IS THERE A PUBLIC WELL WHICH SERVES MORE THAN 25 PEOPLE OR MORE THAN 15 HOMES WITHIN 200 FEET OF THE PROPOSED SEPTIC SYSTEM? No
6. IS THERE A GRAVITY SEWER LINE OR LIFT STATION WITHIN 100 FEET OF THE PROPOSED LOT? No
7. IS THERE A LAKE, STREAM, WETLAND, OR SURFACE WATER WITHIN 75 FEET OF THE PROPOSED AVAILABLE AREA FOR THE PROPOSED SEPTIC SYSTEM? No
8. IS THERE A PROPOSED OR EXISTING PUBLIC DRINKING WATER LINE WITHIN 10 FEET OF THE PROPOSED SEPTIC SYSTEM? No
9. IS THERE A STORM WATER RETENTION AREA OR DRAINAGE EASEMENT WITHIN 15 FEET OF THE PROPOSED SEPTIC SYSTEM? No
10. IS THE SEPTIC SYSTEM IN AN AREA PROPOSED FOR PAVING OR VEHICULAR TRAFFIC? No
11. ARE ALL PRIVATE WELLS, SEPTIC SYSTEMS AND SURFACE WATER ON ADJACENT OR CONTIGUOUS LAND WITHIN 75 FEET OF THE APPLICANT'S LOT, IF PRESENT, SHOWN ON PLOT PLAN? N/A
12. ARE ALL PUBLIC WELLS WITHIN 200 FEET OF THE APPLICANT'S LOT, IF PRESENT, SHOWN ON PLOT PLAN? N/A
13. DOES THE PLOT PLAN INCLUDE A PLAT OF THE LOT OR TOTAL SITE OWNERSHIP DRAWN TO SCALE, BOUNDARIES WITH DIMENSIONS, LOCATIONS OF BUILDING OR RESIDENCES, SWIMMING POOLS, RECORDED EASEMENTS, THE PROPOSED SEPTIC SYSTEM, ANY PROPOSED OR EXISTING WELLS, PUBLIC WATER LINES, PAVED AREAS OR DRIVEWAYS, AND SURFACE WATERS SUCH AS LAKES, PONDS, STREAMS, CANALS, OR WETLANDS? Yes
14. THERE IS 860 SQUARE FEET OF AVAILABLE LAND TO INSTALL THE SEPTIC SYSTEM. THIS AREA EXCLUDES INTERFERENCES. SHADE THIS AVAILABLE AREA ON PLOT PLAN.

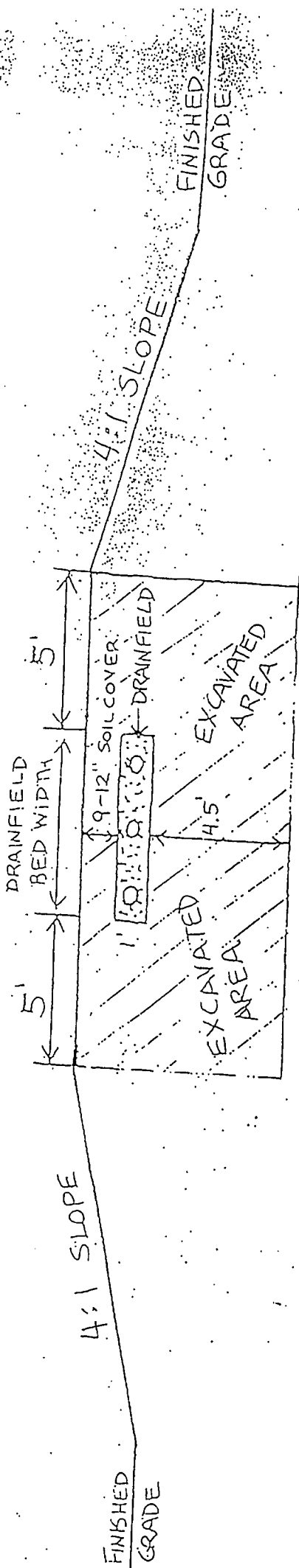
-----ELEVATIONS-----

1. CROWN OF ROAD ELEVATION 9.51 NGVD SHOW LOCATION ON PLOT PLAN. IF ROAD IS NOT PAVED, BENCHMARK ELEVATION 8.89 NGVD SHOW LOCATION ON PLOT PLAN.
2. NATURAL GRADE ELEVATION IN AREA OF PROPOSED SEPTIC SYSTEM 5.9 NGVD SHOW LOCATION ON PLOT PLAN.
2. IS BUILDING LOCATED IN FLOOD HAZARD AREA "A" OR "V" AS IDENTIFIED ON FEMA MAPS? No IF YES, WHAT IS THE MINIMUM REQUIRED FLOOD HAZARD FLOOR ELEVATION OF BUILDING? _____ NGVD.

NOTE: MUST BE CERTIFIED BY A FLORIDA REGISTERED SURVEYOR OF ENGINEER.

CERTIFIED BY: David W. Schuyler
FL. PROFESSIONAL NO. 48644
DATE: 10/18/91 JOB NO. 91-1076-01-04

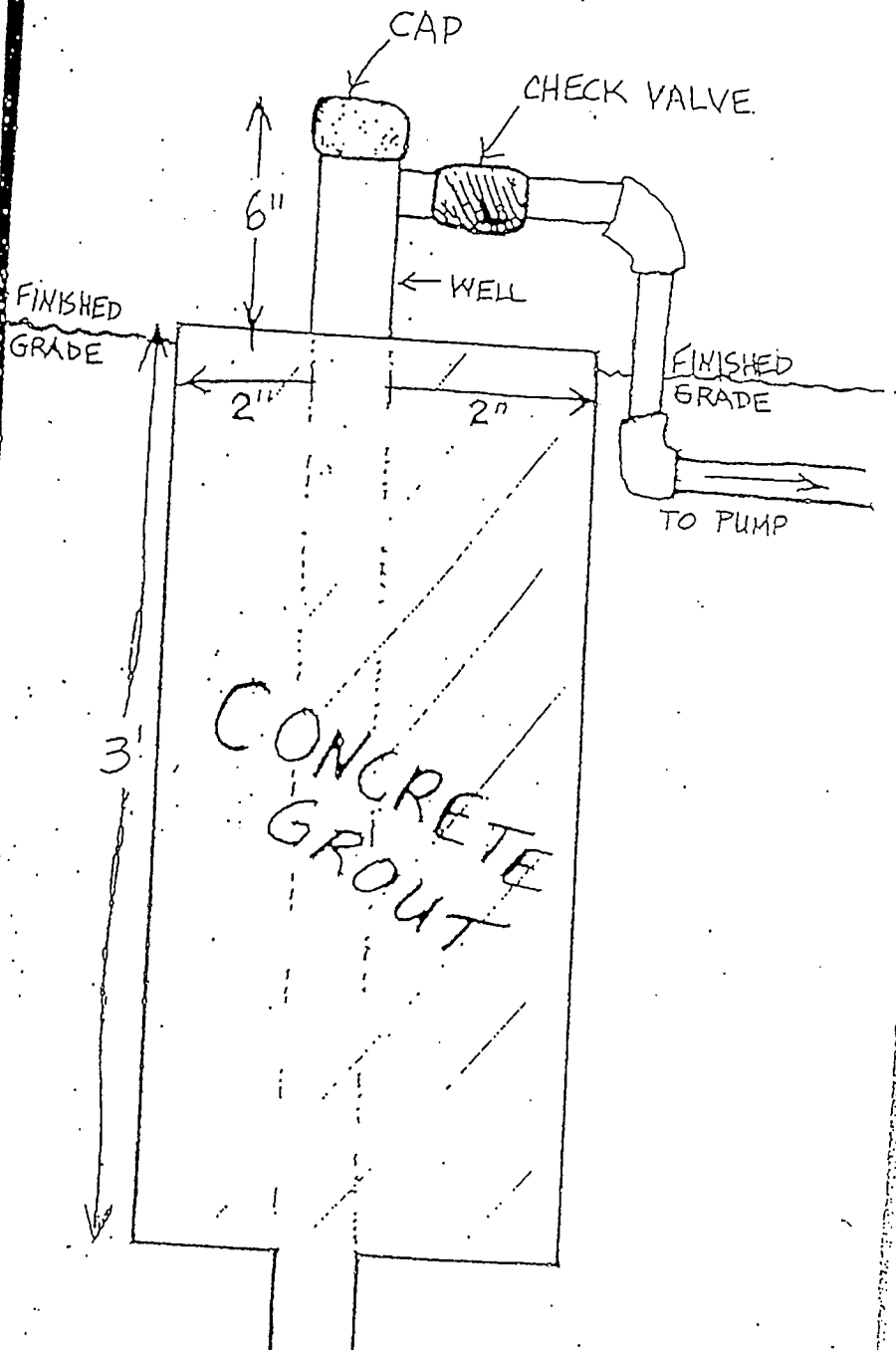
DRAINFIELD MOUND REQUIREMENTS



NOTES THESE REQUIREMENTS MUST BE MET PRIOR TO FINAL APPROVAL.

WELL REQUIREMENTS

NOTE: ALL WELLS MUST BE GROUTED AT LEAST 2" AROUND WELL CASING TO A DEPTH OF 3'. WELL CASING MUST EXTEND 6" ABOVE FINISHED GRADE AS SHOWN BELOW. NOTE LOCATION OF CHECK VALVE.



RECORD OF INSPECTIONS

TOWN OF SEWALL'S POINT, FLORIDA

CERTIFICATE OF APPROVAL FOR OCCUPANCY

162.5RR

Date 4-14-92

This is to request that a Certificate of Approval for Occupancy be issued to Mr Paul Hinos
 For property built under Permit No. 3088 Dated 11/7/91 when completed in
 conformance with the Approved Plans.

Item		
1. LOT STAKES/SET BACKS	<u>12-10-91</u>	Signed _____
2. TERMITE PROTECTION	<u>11-18-91</u>	
3. FOOTING - SLAB	<u>11-11-91</u>	Approved by _____
4. ROUGH PLUMBING	<u>1-26-92</u>	
5. ROUGH ELECTRIC	<u>1-20-92</u>	
6. LINTEL	<u> </u>	
7. ROOF	<u>1-28-92</u>	
8. FRAMING	<u>1-20-92</u>	
9. INSULATION	<u>1-22-92</u>	
10. A/C DUCTS	<u>1-20-92</u>	
11. FINAL ELECTRIC	<u>4-14-92</u>	
12. FINAL PLUMBING	<u>4-14-92</u>	
13. FINAL CONSTRUCTION	<u>4-14-92</u>	

Final Inspection for Issuance of Certificate for Occupancy.

Approved by Building Inspector Dale Brown 4/14/92 date.

Approved by Building Commissioner [Signature] 4/15/92 date.

Utilities notified F.P.L. 4/14/92 date.

Original Copy sent to OWNER

(Keep carbon copy for Town files)

9320

REPLACE SIDING



TOWN OF SEWALL'S POINT BUILDING DEPARTMENT
 One S. Sewall's Point Road
 Sewall's Point, Florida 34996
 Tel: 772-287-2455 Fax 772-220-4765

BUILDING PERMIT CARD

**THIS CARD MUST BE POSTED IN A CONSPICUOUS PLACE IN PLAIN VIEW FROM THE STREET PRIOR TO BEGINNING ANY WORK
 A FINAL INSPECTION IS REQUIRED FOR ALL PERMITS**

PERMIT NUMBER:	9320	DATE ISSUED:	DECEMBER 18, 2009
SCOPE OF WORK:	REPLACED DAMAGED SIDING		
CONDITIONS :			
CONTRACTOR:	STRATICON		
PARCEL CONTROL NUMBER:	133841-011-000-001209	SUBDIVISION	MARGUERITA - LOT 12
CONSTRUCTION ADDRESS:	162 S RIVER RD		
OWNER NAME:	SELLIAN		
QUALIFIER:	JEFF HARDIN	CONTACT PHONE NUMBER:	954-243-7290

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT. A CERTIFIED COPY OF THE RECORDED NOTICE OF COMMENCEMENT MUST BE SUBMITTED TO THE BUILDING DEPARTMENT PRIOR TO THE FIRST REQUESTED INSPECTION.

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN PUBLIC RECORDS OF THIS COUNTY, AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

**24 HOUR NOTICE REQUIRED FOR INSPECTIONS - ALL CONSTRUCTION DOCUMENTS MUST BE AVAILABLE ON SITE
 CALL 287-2455 - 8:00AM TO 4:00PM INSPECTIONS 8:30AM TO 12:00PM - MONDAY, WEDNESDAY & FRIDAY**

REQUIRED INSPECTIONS

UNDERGROUND PLUMBING _____ UNDERGROUND MECHANICAL _____ STEM-WALL FOOTING _____ SLAB _____ ROOF SHEATHING _____ TIE DOWN /TRUSS ENG _____ WINDOW/DOOR BUCKS _____ ROOF DRY-IN/METAL _____ PLUMBING ROUGH-IN _____ MECHANICAL ROUGH-IN _____ FRAMING _____ FINAL PLUMBING _____ FINAL MECHANICAL _____ FINAL ROOF _____	UNDERGROUND GAS _____ UNDERGROUND ELECTRICAL _____ FOOTING _____ TIE BEAM/COLUMNS _____ WALL SHEATHING _____ INSULATION _____ LATH _____ ROOF TILE IN-PROGRESS _____ ELECTRICAL ROUGH-IN _____ GAS ROUGH-IN _____ METER FINAL _____ FINAL ELECTRICAL _____ FINAL GAS _____ BUILDING FINAL _____
---	--

ALL RE-INSPECTION FEES AND ADDITIONAL INSPECTION REQUESTS WILL BE CHARGED TO THE PERMIT HOLDER. THE CONTRACTOR OR OWNER /BUILDER MUST SCHEDULE A FINAL INSPECTION. FAILURE TO RECEIVE A SUCCESSFUL FINAL INSPECTION WILL RESULT IN PERMIT RENEWAL FEES, FINES, AND OR DENIAL OF FUTURE BUILDING PERMITS TO THE CONTRACTOR OR OWNER /BUILDER.

RECEIVED
12-18-09

Town of Sewall's Point

BUILDING PERMIT APPLICATION

Permit Number: _____

Date: 12/10/09

OWNER/TITLEHOLDER NAME: CATHERINE SELLAN

Phone (Day): 914-233-2447 (Fax) _____

Job Site Address: 162 S. RIVER ROAD

City: SEWALLS POINT State: FL Zip: _____

Legal Description _____ Parcel Control Number: _____

Owner Address (if different): SAME City: _____ State: _____ Zip: _____

Scope of work (please be specific): REPLACE MINIMAL SIDING/TRIM DUE TO WATER DAMAGE.

WILL OWNER BE THE CONTRACTOR?

(If yes, Owner Builder questionnaire must accompany application)
YES _____ NO X

Has a Zoning Variance ever been granted on this property?

YES _____ (YEAR) _____ NO X
(Must include a copy of all variance approvals with application)

COST AND VALUES: (Required on ALL permit applications)

Estimated Value of Improvements: \$ 1900.00

(Notice of Commencement required when over \$2500 prior to first inspection, \$7,500 on HVAC change out)

Is subject property located in flood hazard area? VE10 _____ AE9 _____ AE8 X
FOR ADDITIONS, REMODELS AND RE-ROOF APPLICATIONS ONLY:

Estimated Fair Market Value prior to improvement: \$ _____
(Fair Market Value of the Primary Structure only, Minus the land value)
PRIVATE APPRAISALS MUST BE SUBMITTED WITH PERMIT APPLICATION

CONTRACTOR/Company: STRATILON CONSTRUCTION Phone: 954-243-7290 Fax: _____

Street: 26 S. RIVER ROAD City: SEWALL'S POINT State: FL Zip: _____

State License Number: CAC 062578 OR: Municipality: _____ License Number: _____

LOCAL CONTACT: JEFF HARDIN Phone Number: 954-243-7290

DESIGN PROFESSIONAL: _____ Lic# _____ Phone Number: _____

Street: _____ City: _____ State: _____ Zip: _____

AREAS SQUARE FOOTAGE: Living: _____ Garage: _____ Covered Patios/ Porches: _____ Enclosed Storage: _____

Carport: _____ Total under Roof _____ Elevated Deck: _____ Enclosed area below BFE*: _____
* Enclosed non-habitable areas below the Base Flood Elevation greater than 300 sq. ft. require a Non-Conversion Covenant Agreement.

CODE EDITIONS IN EFFECT THIS APPLICATION: Florida Building Code (Structural, Mechanical, Plumbing, Existing, Gas): 2007
National Electrical Code: 2005(2008 after 6/1/09) Florida Energy Code: 2007, Florida Accessibility Code: 2007, Florida Fire Prevention Code 2007

NOTICES TO OWNERS AND CONTRACTORS:

1. YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. WHEN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.
2. THERE ARE SOME PROPERTIES THAT MAY HAVE DEED RESTRICTIONS RECORDED UPON THEM. THESE RESTRICTIONS MAY LIMIT OR PROHIBIT THE WORK APPLIED FOR IN YOUR BUILDING PERMIT. IT IS YOUR RESPONSIBILITY TO DETERMINE IF YOUR PROPERTY IS ENCUMBERED BY ANY RESTRICTIONS. SOME RESTRICTIONS APPLICABLE TO THIS PROPERTY MAY BE FOUND IN THE PUBLIC RECORDS OF MARTIN COUNTY OR THE TOWN OF SEWALL'S POINT, THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.
3. BUILDING PERMITS FOR SINGLE FAMILY RESIDENCES AND SUBSTANTIAL IMPROVEMENTS TO SINGLE FAMILY RESIDENCES ARE VALID FOR A PERIOD OF 24 MONTHS. RENEWAL FEES WILL BE ASSESSED AFTER 24 MONTHS PER TOWN ORDINANCE 50-95.
4. THIS PERMIT WILL BECOME NULL AND VOID IF THE WORK AUTHORIZED BY THIS PERMIT IS NOT COMMENCED WITHIN 180 DAYS, OR IF WORK IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AT ANY TIME AFTER THE WORK IS COMMENCED. ADDITIONAL FEES WILL BE ASSESSED ON ANY PERMIT THAT BECOMES NULL AND VOID. REF. FBC 2004 W/ 2006 REVISIONS SECT. 105.4.1, 105.4.1.1 - .5.

*****A FINAL INSPECTION IS REQUIRED ON ALL BUILDING PERMITS*****

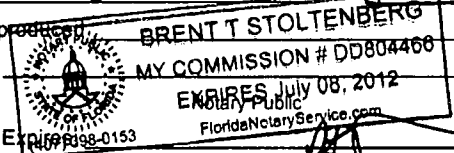
APPLICATION IS HEREBY MADE TO OBTAIN A PERMIT TO DO THE WORK AND INSTALLATIONS AS SPECIFICALLY INDICATED ABOVE. I CERTIFY THAT NO WORK OR INSTALLATION HAS COMMENCED PRIOR TO THE ISSUANCE OF A PERMIT AND THAT THE INFORMATION I HAVE FURNISHED ON THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I AGREE TO COMPLY WITH ALL APPLICABLE CODES, LAWS, AND ORDINANCES OF THE TOWN OF SEWALL'S POINT DURING THE BUILDING PROCESS.

OWNER SIGNATURE (required)
OR OWNER'S LEGAL AUTHORIZED AGENT (PROOF REQUIRED)

Catherine Sellan

State of Florida, County of: ST. LUCIE
This the 10th day of December, 20 09
by CATHERINE SELLAN who is personally

known to me or produced as identification. BRENT T STOLTENBERG
MY COMMISSION # DD804466



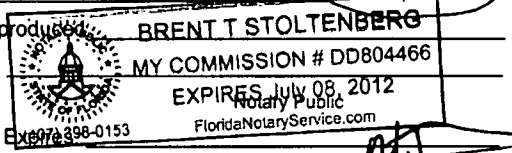
My Commission Expires 07-08-2012 FloridaNotaryService.com

CONTRACTOR SIGNATURE (required)

Jeff Hardin

On State of Florida, County of: ST. LUCIE
This the 10th day of December, 20 09
by JEFF HARDIN who is personally

known to me or produced as identification. BRENT T STOLTENBERG
MY COMMISSION # DD804466



My Commission Expires 07-08-2012 FloridaNotaryService.com

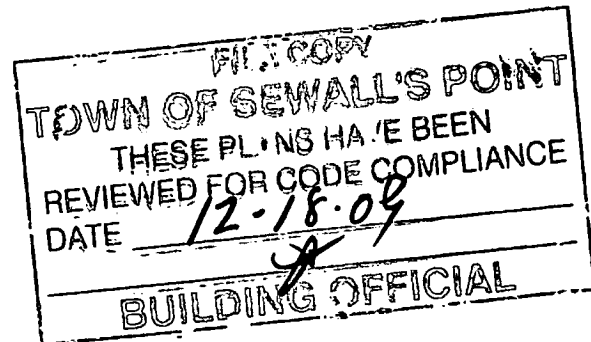
SINGLE FAMILY PERMIT APPLICATIONS MUST BE ISSUED WITHIN 30 DAYS OF APPROVAL NOTIFICATION (FBC 105.3.4) ALL OTHER APPLICATIONS WILL BE CONSIDERED ABANDONED AFTER 180 DAYS (FBC 105.3.2) - PLEASE PICK UP YOUR PERMIT PROMPTLY!

Proposed Scope of Work for:
162 S. River Road
Sewall's Point, FL

1. All siding on the garage South side will be removed and replaced with Hardi-plank siding.
2. Remove and replace miscellaneous wood trim and siding, approximately 50 square feet of siding.
3. Replace approximately 40 lineal feet of fascia.
4. Replace all siding and trim for the upper portion of the chimney.

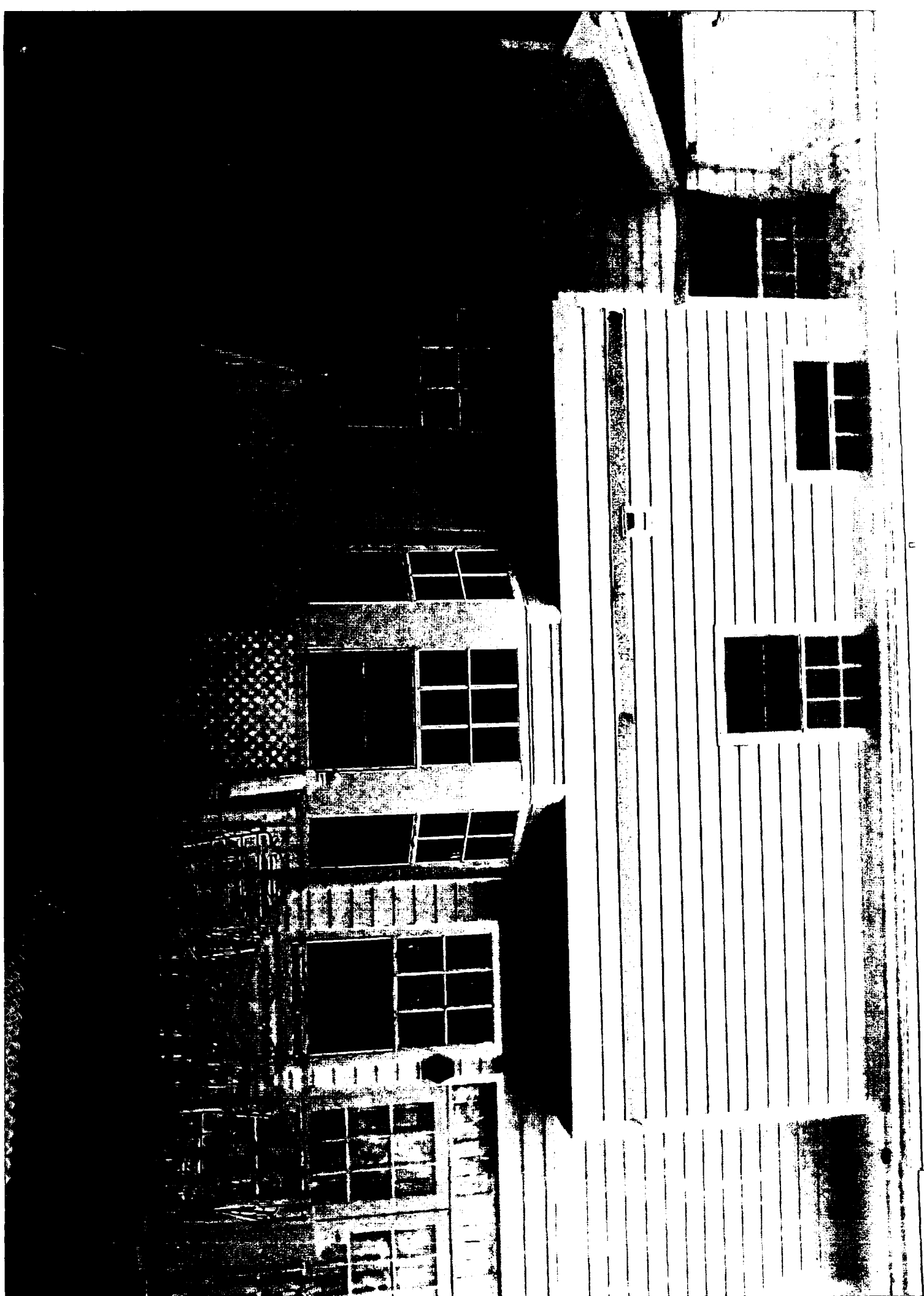
All siding will be Hardi-plank siding and installed as per manufacturers specifications and per NER-405.

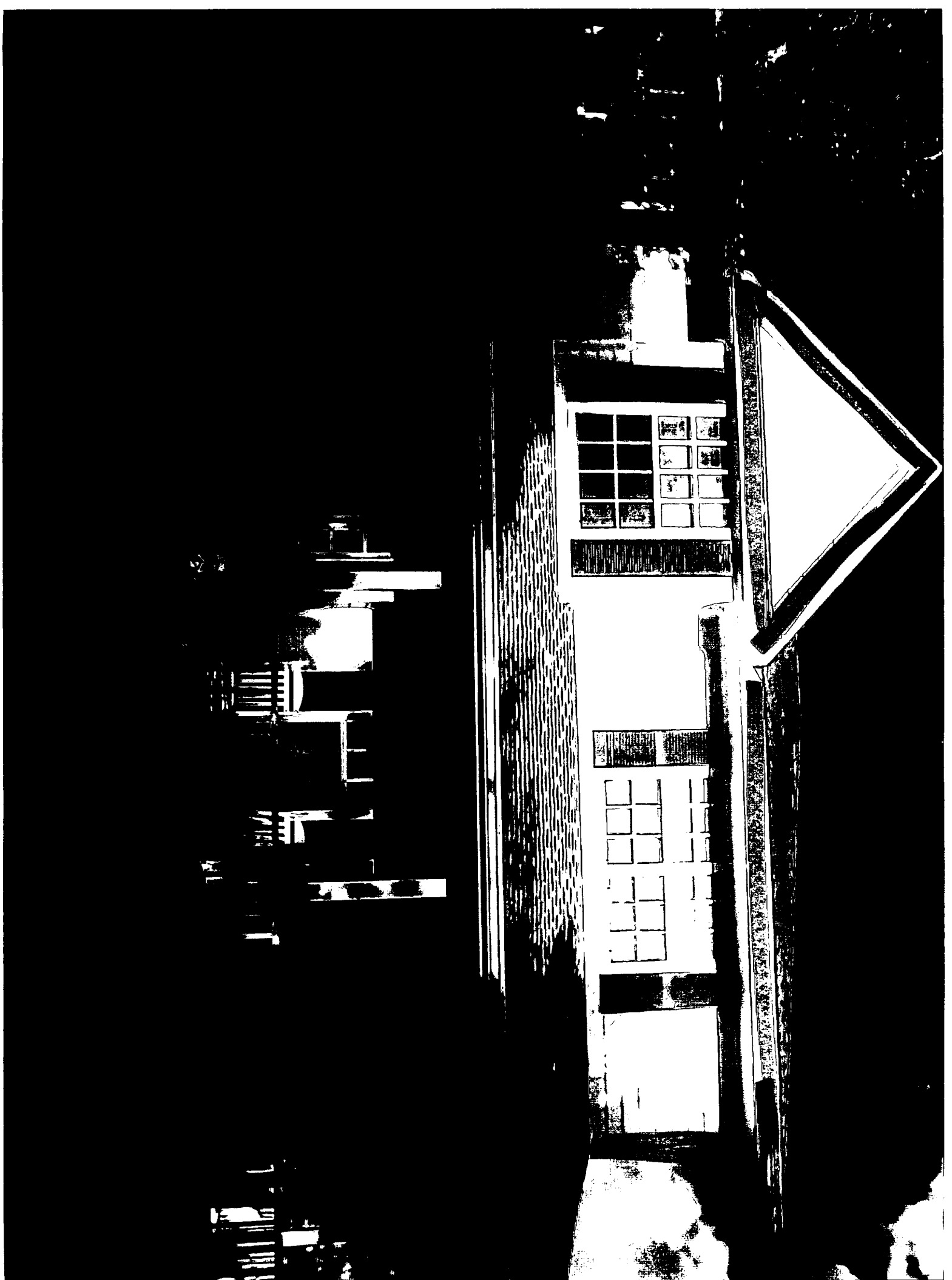
All trim and fascia will be replaced with either Hardi-trim or cedar.



Thursday, December 10, 2009











BUILDING CODE COMPLIANCE OFFICE (BCCO)
 PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
 METRO-DADE FLAGLER BUILDING
 140 WEST FLAGLER STREET, SUITE 1603
 MIAMI, FLORIDA 33130-1563
 (305) 375-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

James Hardie Building Product, Inc.
 10901 Elm Avenue
 Fontana, CA 92337

SCOPE: This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone.

DESCRIPTION: Hardiplank, Cemplank, Hardipanel, Cempanel, Hardisoffit and Cemsoffit
APPROVAL DOCUMENT: Drawing No. HPNL-8X, HPLK-4X8 & HSOFFIT-8X, titled "Hardipanel & Cempanel; Hardiplank & Cemplank; Hardisoffit & Cemsoffit Installation Details", sheets 1 through 3 with no revisions, prepared, signed and sealed by Ronald Ogawa, P.E., dated 04/02/04, bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews NOA # 02-0729.02 and, consists of this page, evidence page as well as approval document mentioned above.

The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**



NOA No 07-0418.04
 Expiration Date: May 01, 2012
 Approval Date: May 31, 2007
 Page 1

James Hardie Building Products, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE PAGE

A DRAWING (submitted under NOA No. 02-0729.02)

1. Drawing prepared by James Hardie Building Products, Inc. titled "Hardipanel & Cempanel; Hardiplank & Cemplank; Hardisoffit & Cemsoffit Installation Details", drawing No HPNL-8X, HPLK-4X8 & HSOFFIT-8X, dated 04/02/04, with no revisions, signed and sealed by R. L. Ogana, PE.

B TEST (submitted under NOA No. 02-0729.02)

	Laboratory Report	Test	Date	Signature
1.	ATI-16423-1	PA 202 & 203	03/18/96	A. N. Reeves PE.
2.	ATI 16423-2	PA 202 & 203	03/18/96	A. N. Reeves PE.
3.	ATI 16423-3	PA 202 & 203	03/18/96	A. N. Reeves PE.

C QUALITY ASSURANCE

1. Building Code Compliance Office.

D MATERIAL CERTIFICATION (submitted under NOA No. 02-0729.02)

- 1 Standard Compliance (ASTM C-1185) issued by ETL Testing Laboratories on 05/09/95 signed by D. K. Tucker, PE.
- 2 Evaluation Report NER-405 issued by National Evaluation Service, Inc. on 01/01/93, with no signature.

E STATEMENT (submitted under NOA No. 02-0729.02)

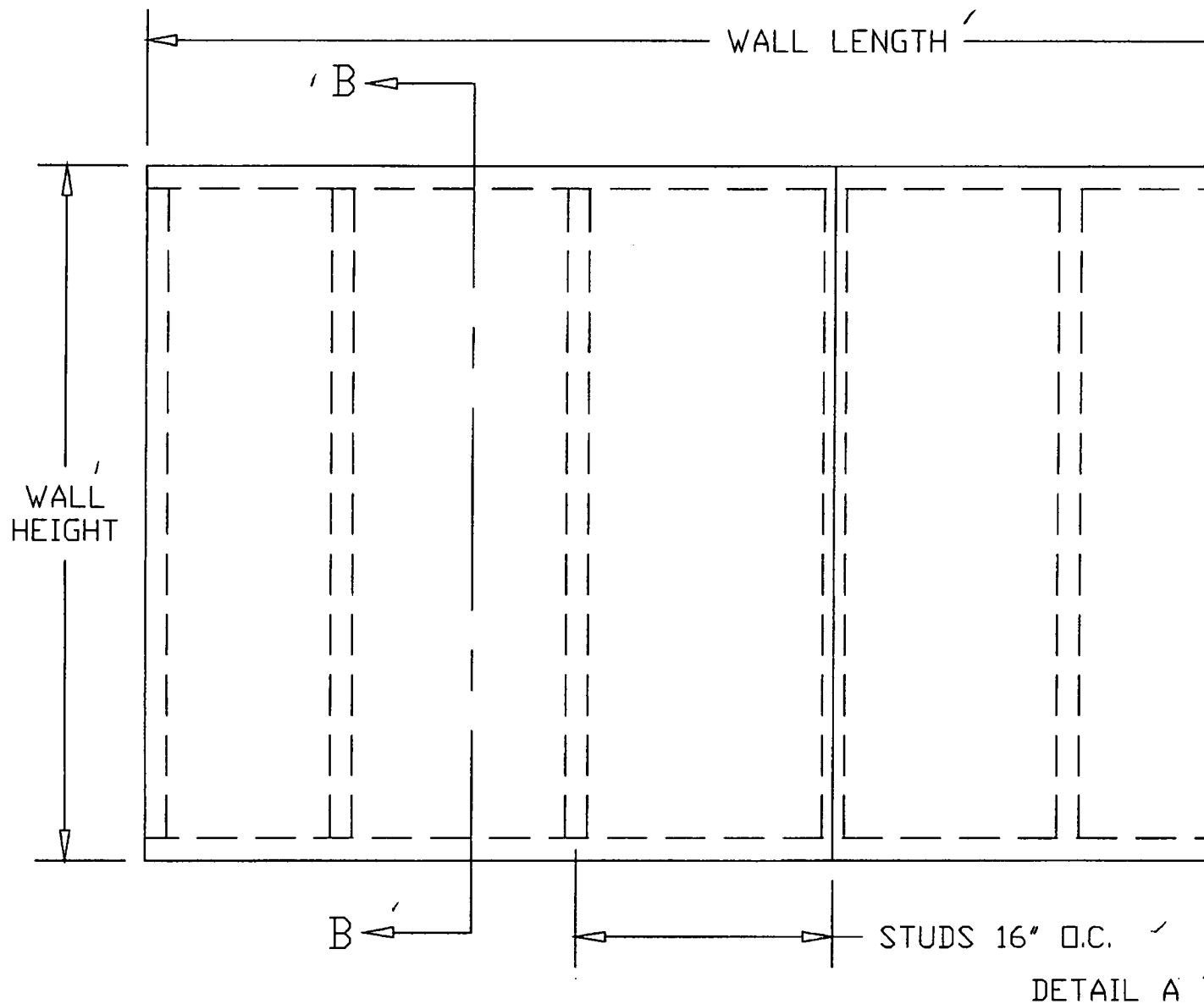
1. No change letter issued by James Hardie Building Products, Inc. issued on 02/16/99, signed and by J. L. Mulder.
2. Power of Attorney and Appointment of Domestic Representative, signed by P. Shafron on 04/17/02, Assignment and Memorandum of Assignment signed by T. P. Dolmans on 04/16/02 and Assignment for the trade marks of Cemplank, Cempanel and Cemsoffit to the Assistant Commissioner for Trademarks signed by V. Lester and P. Shafron on 04/18/02.

E OTHERS

1. No change letter issued by James Hardie Building Products, Inc. issued on 04/02/07, signed and sealed by Chad Diercks, Technical Services Manger.
2. Engineer of record letter issued by Ronald Ogawa & Associates, Inc., dated April 3, 2007, signed and sealed by Ronald I. Ogawa, P.E.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No 07-0418.04
Expiration Date: May 01, 2012
Approval Date: May 31, 2007

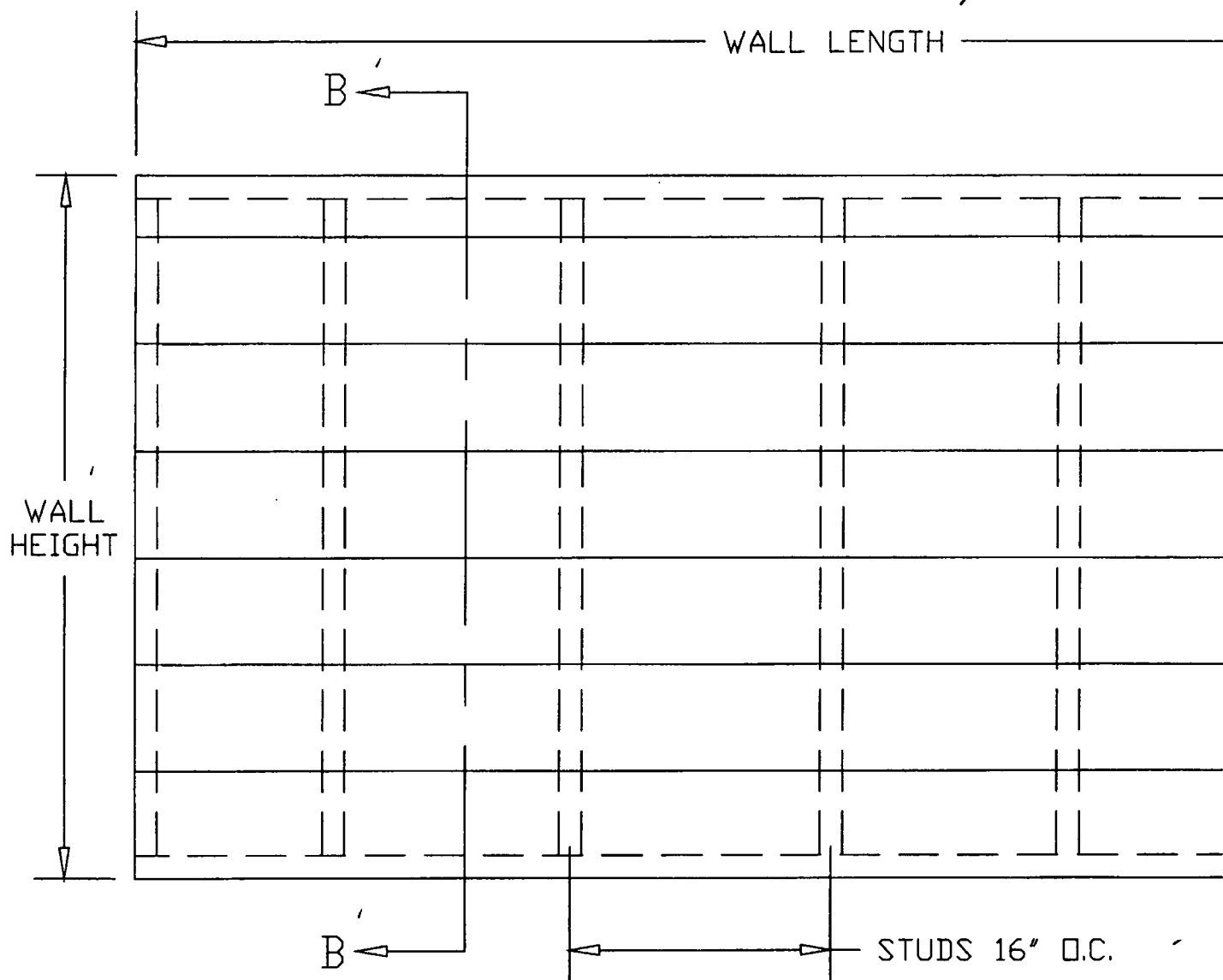


HARDIPANEL & CEMPANEL SIDING INSTALLATION DETAILS

The panels are applied vertically, avoiding horizontal joints, over $5/8"$ (5 ply) APA rated plywood supported by a minimum of $2" \times 4"$ wood studs or 20 ga. $\times 3 \ 5/8"$ $\times 1 \ 3/8"$ steel studs spaced a maximum of 16" o.c. When installed on wood studs panels shall be fastened with $6d \times 2"$ long galvanized box nails; on steel studs it shall be fastened with $\#8 \times 1 \ 5/8"$ $\times 0.315"$ corrosion resistance H.D. ribbed bugle screws. The fasteners shall be placed @ 6" o.c. around the perimeter of the panel and intermediate studs, driven through the plywood sheathing into the studs. All joints shall be over studs. Nails and screws shall have a minimum edge distance of $3/8"$ and a minimum clearance of 2" from the corners.

$5/8"$ PLYWOOD SHEATHING SHALL BE ATTACHED TO THE STUDS IN ACCORDANCE TO FLORIDA BUILDING CODE, WITH ANOTHER SET OF NAILS OR SCREWS AS UNDERLINED ABOVE.

STUDS (METAL
OR WOOD)



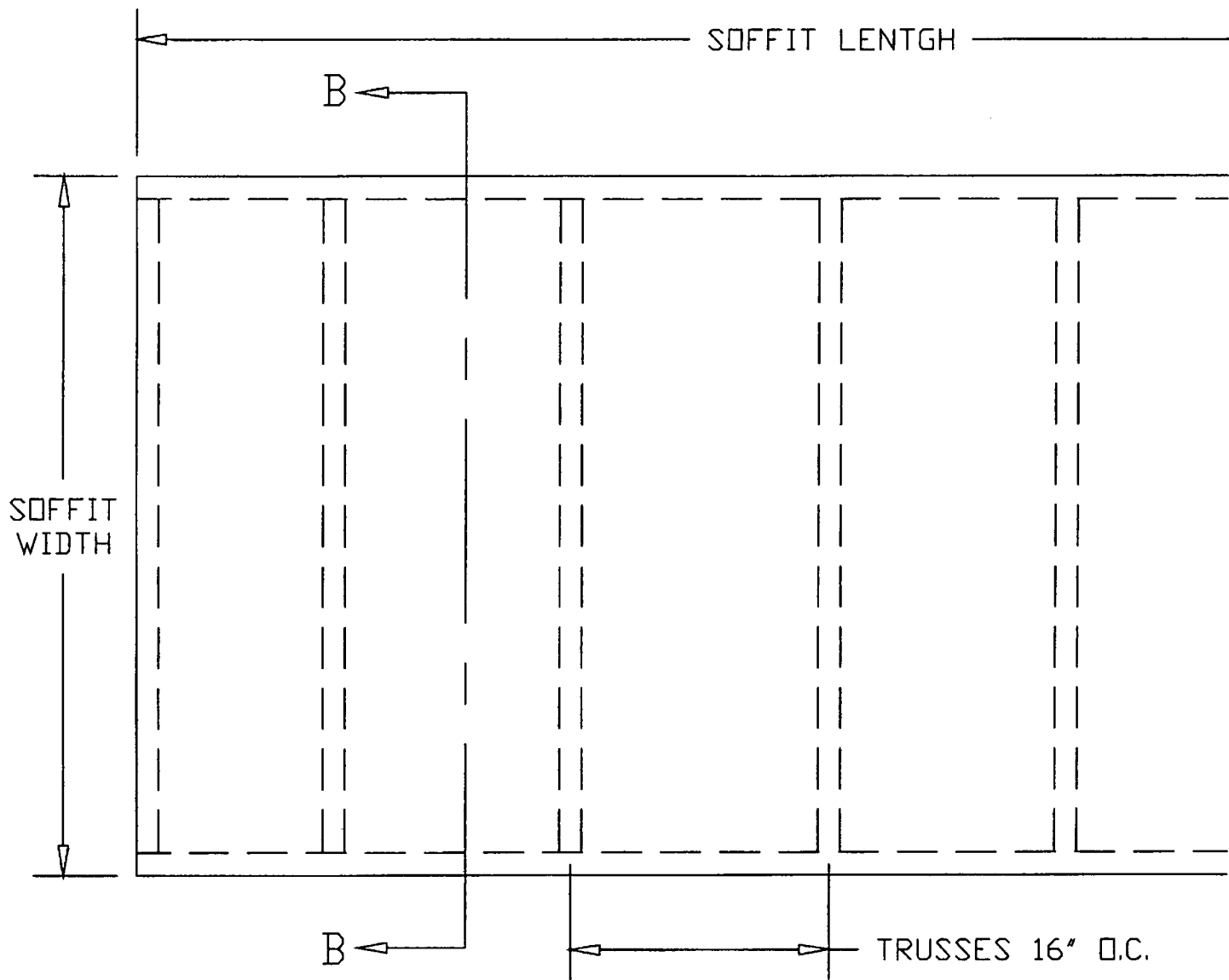
DETAIL A

HARDIPLANK & CEMPLANK SIDING INSTALLATION DETAILS

The planks are applied horizontally commencing from the bottom course of a wall with 1 1/4" wide laps at top of the plank. The optional PVC cover molding 1 5/8" wide is applied to the bottom plate under the bottom plank course. The vertical joints must be over framing members. Optional PVC butt joints inserts are used for on-stud jointing. The planks are to be installed over 5/8" (5 ply) APA rated plywood supported by a minimum of 2"x4" wood studs or 20 ga. x 3 5/8" x 1 3/8" steel studs spaced a maximum of 16" o.c. The siding shall be fastened through overlapping planks with 8d x 2 1/2" long galvanized box nails over wood studs or with #8 x 2 1/4" long x 0.315" corrosion resistance H.D. ribbed bugle screws over steel studs. The fasteners shall be placed in the over-lapping area 18" o.c. vertically and 16" o.c. horizontally into the studs through the 5/8" plywood sheathing. A distance of 3/4" from the edges shall always be observed.

STUDS (METAL OR WOOD)

5/8" PLYWOOD SHEATHING SHALL BE ATTACHED TO THE STUDS IN ACCORDANCE TO FLORIDA BUILDING CODE, WITH ANOTHER SET OF NAILS OR SCREWS AS UNDERLINED ABOVE.



DE

TRUSSES (METAL
OR WOOD)

HARDISOFFIT & CEMSOFFIT PANEL INSTALLATION DETAILS

The soffit panels are to be installed over minimum 2"x4" wood joists or 20 ga. x 3 5/8" x 1 3/8" steel joists spaced a maximum of 16" o.c. When installed on wood joists Hardisoffit shall be fastened with 6d x 2" long galvanized box nails; on steel studs it shall be fastened with #8 x 1 1/4" x 0.315" corrosion resistance H.D. ribbed bugle screws. The fasteners shall be placed 4" o.c. around the perimeter of the panel and intermediate studs. Nails and screws shall have a minimum edge distance of 3/8" and a minimum clearance of 2" from corners.

HARDISI
& CEMSI
F



ICC Evaluation Service, Inc.
www.icc-es.org

Business/Regional Office ■ 5360 Workman Mill Road, Whittier, California 90601 ■ (562) 699-0543
Regional Office ■ 900 Montclair Road, Suite A, Birmingham, Alabama 35213 ■ (205) 599-9800
Regional Office ■ 4051 West Flossmoor Road, Country Club Hills, Illinois 60478 ■ (708) 799-2305

Legacy report on the 2000 International Building Code®, the BOCA® National Building Code/1999, the 1999 Standard Building Code®, the 1997 Uniform Building Code™, the 2000 International Residential Code®, the 2002 Accumulative Supplement to the International Codes™ and the 1998 International One and Two Family Dwelling Code®

DIVISION 06 — WOOD AND PLASTICS
Section 06160 — Sheathing

DIVISION 07 — THERMAL AND MOISTURE PROTECTION
Section 07450 — Fiber-Reinforced Cementitious Panels
Section 07460 — Siding

JAMES HARDIE BUILDING PRODUCTS, INC.
10901 ELM AVENUE
FONTANA, CALIFORNIA 92337
909-356-6366
www.jameshardie.com

1.0 SUBJECT

1.1 SIDING AND SOFFIT BOARDS

- 1.1.1 Hardiplank® lapsiding
1.1.2 Hardiflex™ panel
1.1.3 Hardipanel® siding
1.1.4 Harditex® baseboard
1.1.5 Hardisoffit® panel
1.1.6 Hardishingle™ cladding
1.1.7 Hardishingle™ panel
1.1.8 Hardipanel® Shiplap

1.2 LINING BOARD AND UNDERLAYMENT

- 1.2.1 Titan® panel
1.2.2 Hardibacker® backerboard
1.2.3 Hardibacker® underlayment
1.2.4 Titan®-FR panel
1.2.5 Hardibacker 500® backerboard

1.3 SUBFLOOR PANELS

- 1.3.1 Compressed Sheet™

2.0 PROPERTY FOR WHICH EVALUATION IS SOUGHT

- 2.1 Exterior Wall Covering
2.2 Structural Performance
2.3 Noncombustible Construction
2.4 Fire-resistive Construction
2.5 Thermal Resistance

3.0 DESCRIPTION

3.1 GENERAL

The exterior siding and soffit boards, interior lining and underlayment, and subfloor panels are single-faced, cellulose fiber-reinforced cement (fiber-cement) building boards. The Titan®-FR panel is a composite panel composed of a 1/8-inch (3.2 mm) thick fiber-cement skin laminated to 1/2-inch (12.7 mm) thick proprietary Type X gypsum board.

All fiber-cement planks and panels are produced from the same components and differ in surface treatments and board configurations. Exterior siding and soffit boards are identified as Hardiplank® (Hardihome™, Sentry™, Colonial Smooth®, Colonial Roughsawn®, Cemplank® and Hardishingle™), Hardiflex™, Hardipanel®, Cempanel®, Harditex® baseboard, Hardisoffit®, Cemsoffit® boards, Hardishingle™ panel and Hardishingle™ cladding shingles. Interior backerboards and underlayments are identified as Titan®, Hardibacker® (backerboard), Hardibacker® (underlayment), Ultraboard® and Titan®-FR panel. Subfloor panels are identified as Compressed Sheet. The planks, panels, and shingles are manufactured by the Hatschek process and cured by high-pressure steam autoclaving. All products are cut to shape on-site by the score-and-snap method using a tool available from the manufacturer, a hand guillotine or a handsaw utilizing a carbide blade.

The fiber-cement products have a flame-spread index of 0 and a smoke developed index of 5 when tested in accordance with ASTM E 84. The products are classified as noncombustible when tested in accordance with ASTM E 136. The siding and soffit products comply with ASTM C 1186, Standard Specification for Grade II, Type A, Non-Asbestos Fiber-Cement Flat Sheets. The subfloor panels comply with ASTM C 1186, Standard Specification for Grade IV, Type A, Non-Asbestos Fiber-Cement Flat Sheets. The interior lining products, Hardibacker® and Titan®, comply with ASTM C 1288, Standard Specification for Grade II Discrete Non-Asbestos Fiber-Cement Interior Substrate Sheets. The interior lining product Hardibacker 500® complies with ASTM C 1288, Standard Specification for Grade I Discrete Non-Asbestos Fiber-Cement Interior Substrate Sheets. All interior lining boards comply with ANSI A118.9 as cementitious backer units. When tested in accordance with ASTM C 177, "K" and "R" values for the products are as shown in Table 4 of this report. When tested in accordance with ASTM E 96, products with a thickness of 1/4-inch (6.4 mm) or greater have demonstrated the permeance values given in Table 5 of this report.

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3.1.1 James Hardie Trade Names

Hardiplank®	Hardihome™
Cemplank®	Hardipanel®
Sentry™	Cempanel®
Colonial Smooth®	Hardiflex™
Colonial Woodgrain®	Harditex®
Hardisoffit®	Hardie®
Cemsoffit®	James Hardie®
Hardibacker®	Titan®-FR
Ultraboard®	Max "C"™
Titan®	Hardibacker 500®
Hardirock®	

3.2 SIDING AND SOFFIT BOARDS

Hardiplank®, Hardiflex™, Hardipanel®, Harditex® baseboard, Hardishingle™ planks and panels, Hardisingle™ cladding shingles, and Hardisoffit® boards are used as siding on exterior walls and soffits. The exterior siding and soffit products may be supplied unprimed or primed for subsequent application of a compatible primer and/or exterior-grade topcoat(s).

Nominal dimensions are noted in [Table 1](#) of this report, maximum basic wind speeds in [Table 2a, 2b, 6, 7, 8, and 9](#) of this report, and maximum shear values in [Table 3](#) of this report.

3.2.1 Hardiplank® (Hardihome™, Sentry™, Colonial Smooth®, Colonial Roughsawn®, Hardishingle™ and Cemplank®) Lap Siding

3.2.1.1 General: Lap siding is available in various finish textures. The siding is applied horizontally commencing from the bottom course of a wall with minimum 1¹/₄-inch (32 mm) wide laps at the top edge. Vertical joints butt over studs except where the "off-stud splice device" is utilized as described in Section 3.2.1.2 of this report, or where the planks are installed over solid panel sheathing.

When installed on wood-framing members, the siding shall be fastened either through the overlapping planks (face nailed) or through the top edge of single planks (blind nailed) with corrosion-resistant nails into each wood-framing member. The lap conceals the fasteners in the previous course when blind nailed. When attached to metal framing members, the siding is fastened either through the overlapping planks with 1⁵/₈-inch (41 mm) long No. 8 by 0.323-inch (8.2 mm) HD, self-drilling, corrosion-resistant, ribbed buglehead screws or with 0.100 in. (2.54 mm) shank by 0.25 in. (6.4 mm) HD by 1¹/₂-in. (38 mm) long ET & F brand pin fasteners at each metal framing member, or through the top edge of single planks with minimum 1¹/₄-inch (32 mm) long No. 8 by 0.375-inch (9.5 mm) HD, self-drilling, corrosion-resistant, ribbed waferhead screws or with 0.100 in. (2.54 mm) shank by 0.313 in. (7.5 mm) HD by 1 ½ in. (38 mm) long ET & F Panelfast® brand fasteners at each metal framing member. Planks may also be fastened to a wall constructed of concrete masonry units complying with ASTM C 90 with 0.14 in. (3.5 mm) shank by 0.300 in. (7.6 mm) HD by 1 1/4 in. (32 mm) long ET & F brand Stud Nails. The lap conceals the fasteners in the previous course.

3.2.1.2 Off-Stud Splice Device: Vertical joints of the planks shall butt over framing members or between the framing members when an "off-stud splice device" is placed on each plank end. The splice device's bottom lip is placed over the adjacent solid course of planks. The plank is then fastened to the framing. The abutting plank is positioned and fastened into place ensuring that the lower edges of the two planks align. The metal device is located centrally over the joint. Restrictions on the "off-stud splice device" locations are as follows:

- Splices shall be located a minimum of two stud cavities from wall corners.
- Successive splices within the same plank course shall be located no closer than 48 inches (1219 mm) from one another.
- Splices shall be staggered at minimum 24-inch (610 mm) intervals when located in the same wall cavity.
- Splices shall be at least one stud cavity away from door or window openings.

Where a specified level of wind resistance is required, plank lap siding shall be attached to solid panel sheathing or framing members, appropriately spaced, with fastener types, lengths, and spacing described in [Tables 2b and 9](#) of this report.

3.2.2 Hardiflex™ Siding (Hardipanel® Smooth)

Hardiflex™ siding is used as an exterior wall cladding. The siding has a smooth unsanded surface. Dimensions are as noted in [Table 1](#) of this report. Fasteners are installed with a minimum 3¹/₈-inch (9.5 mm) edge distance and a minimum 2-inch (51 mm) clearance from corners. Joints are fastened at abutting sheet edges and optionally protected by polyvinyl chloride (PVC) joint treatment, lumber battens or sealant.

Where a specified level of wind resistance or shear resistance is required, the Hardiflex™ panel is attached to framing members, appropriately spaced, with fastener types, lengths, and spacing described in [Table 2a](#) and [Table 3](#) of this report.

3.2.3 Hardipanel® Siding (Cemplank® Siding)

Hardipanel® siding is available in various surface textures including smooth. Dimensions are noted in [Table 1](#) of this report. Fasteners are installed with a minimum 3¹/₈-inch (9.5 mm) edge distance and a minimum 2-inch (51 mm) clearance from corners. Joints are fastened at abutting sheet edges and optionally covered by polyvinyl chloride (PVC) joint treatment, lumber battens or sealant.

Where a specified level of wind resistance or shear resistance is required, the Hardipanel® siding is attached to framing members, appropriately spaced, with fastener types, lengths, and spacing described in [Table 2a](#) and [3](#) of this report.

3.2.4 Harditex® Baseboard

Harditex® baseboard is for exterior applications to walls and soffits. Dimensions are noted in [Table 1](#) of this report. Harditex® baseboard has a smooth finish and is available with either tapered or trough edges on the two long sides for joint treatment or all square edges. Harditex® baseboard is supplied either sealed or unsealed for the subsequent application of a primer or sealer by the end user as a component in a direct-applied exterior coating or finish system. Joints shall be sealed with a sealant or bedding compound, including any required joint reinforcing mesh or tape, specified by the coating manufacturer. Other installation details are in accordance with Section 3.2.2 of this report. Harditex® baseboard has been evaluated for water-resistant qualities but its use as an alternative to a weather-resistant barrier is outside the scope of this report, see Section 7.4 of this report.

Where a specified level of wind resistance or shear resistance is required, the Harditex® baseboard is attached to framing members, appropriately spaced, with fastener types, lengths, and spacing described in [Table 2a or 3](#) of this report.

3.2.5 Hardisoffit® Board (Cemsoffit® Board)

Hardisoffit® board is for use as exterior vented or unvented soffits. Hardisoffit® board is available with either a woodgrain texture or a smooth unsanded surface. Vented Hardisoffit® provides 5 square inches of net free ventilation per lineal foot of soffit. Dimensions are noted in [Table 1](#) of this report. All Hardisoffit® board edges are supported by framing with fasteners installed with a minimum $\frac{3}{8}$ -inch (9.5 mm) edge distance and minimum 2-inch (51 mm) clearance from corners. Hardisoffit® boards are attached to framing members with fastener types, lengths, and spacings described in [Table 2a and 3](#) of this report.

3.2.6 Hardishingle™ Cladding (individual shingles)

Hardishingle™ cladding shall be installed over solid wall sheathing which complies with the applicable code. Dimensions are as noted in [Table 1](#) of this report. The wall sheathing shall be protected by a weather-resistive barrier which complies with the applicable code.

When Hardishingle™ cladding is installed over minimum $\frac{15}{32}$ -inch (11.9 mm) thick plywood complying with the applicable code, with two corrosion resistant roofing nails [0.121-inch (3.1 mm) shank diameter by 0.371-inch (9.4 mm) head diameter by $1\frac{1}{4}$ -inch (32 mm) long] spaced a maximum of 1 inch (25.4 mm) from each edge and the nails positioned to be covered 1 inch (25.4 mm) nominally by the succeeding course, the maximum allowable wind loads, building heights, and exposure categories for the systems installed with 8-, 7-, and 6-inch (203, 178, and 152 mm) weather exposures, shall be as indicated in [Table 6A, 6B, and 6C](#) of this report. Nails shall secure siding but shall not be overdriven.

When Hardishingle™ cladding is installed over minimum $\frac{7}{16}$ -inch (11.1 mm) thick Oriented Strand Board (OSB), complying with the applicable code, with two corrosion resistant siding nails [0.091-inch (2.3 mm) shank diameter x 0.221-inch (5.5 mm) head diameter by $1\frac{1}{2}$ -inch (38 mm) long] spaced a maximum of 1 inch (25.4 mm) from each edge and the nails positioned to be covered 1 inch (25.4 mm) nominally by the succeeding course, the maximum allowable wind loads, building heights, and exposure categories for the systems installed with 8-, 7-, and 6-inch (203, 178, and 152 mm) weather exposures, shall be as indicated in [Table 7A, 7B, and 7C](#) of this report. Nails shall secure siding but shall not be overdriven.

When Hardishingle™ cladding is installed over minimum $\frac{7}{16}$ -inch (11.1 mm) thick Oriented Strand Board (OSB), complying with the applicable code, with three corrosion resistant siding nails [0.091-inch (2.3 mm) shank diameter x 0.221-inch (5.5 mm) head diameter by $1\frac{1}{2}$ -inch (38 mm) long] for 12-inch (305 mm) wide shingles and two corrosion resistant siding nails for 6- and 8-inch (152 mm and 203 mm) wide shingles, the maximum allowable wind loads, building heights, and exposure categories for the systems installed with 8-, 7-, and 6-inch (203, 178, and 152 mm) weather exposures, shall be as indicated in [Table 8A, 8B, and 8C](#) of this report. One siding nail shall be spaced a maximum of 1 inch (25.4 mm) from each edge on the panel, with the third siding nail installed midspan of the 12-inch (305 mm) wide shingles. All nails shall be covered 1 inch (25.4 mm) nominally by the succeeding course. Nails shall secure siding but shall not be overdriven.

3.2.7 Hardishingle™ Panels

Hardishingle™ panels have a woodgrain texture and are available in three configurations: half-round®, staggered-edge®, and square-edge®. Dimensions are as noted in [Table 1](#) of this report. The siding is applied horizontally to braced

wall framing complying with the applicable code commencing from the bottom course of a wall. Install Hardishingle™ panels with joints in moderate contact. Due to the overlapping of the panels, joint sealant is not required. Fasteners are a minimum 0.083-inch (2.1 mm) shank x 0.187-inch (4.7 mm) HD by $1\frac{1}{2}$ -inch (33 mm) long corrosion-resistant siding nail. For application to open braced framing, vertical joints butt over studs.

Where a specified level of wind resistance is required, Hardishingle™ panel sidings are attached to framing members appropriately spaced or to solid wall sheathing, with fastener types, lengths, and spacing described in [Table 2](#) of this report.

Secure a $\frac{1}{4}$ -inch (6.4 mm) thick lath strip and a minimum $9\frac{1}{4}$ -inch (235 mm) wide Hardiplank® lap siding starter course. Trim the first panel so the end aligns with the furthest stud. Allow trimmed panel $\frac{1}{8}$ inch (3.2 mm) from the trim board for caulk and secure above keyways [approximately 8 inches (203 mm) clearance from butt edge of panel] on 16-inch (406 mm) or 24-inch (310 mm) centers [$13\frac{3}{4}$ -inch (349 mm) centers maximum for application only to minimum $\frac{7}{16}$ -inch (11.1 mm) thick APA rated Oriented Strand Board sheathing]. Work across the wall allowing $\frac{1}{8}$ -inch (3.2 mm) gap from trim.

Start the second course, and every following even number course (i.e. fourth, sixth) by moving the equivalent of one full stud cavity from the straight edge end (the left side). Save this piece for the other end of the wall. Secure the beginning panel leaving $\frac{1}{8}$ -inch (3.2 mm) clearance from the trim board for caulking. Position nails to penetrate through the previous course and into the framing members or Oriented Strand Board.

When a course is broken by a window or doorway, continue the application as if the wall was complete. Trimming for the opening and using the resulting piece may throw off the spacing above the break.

3.2.8 Hardipanel® Shiplap Panel Siding

Hardipanel® Shiplap panel siding is used as an exterior wall cladding. The siding is available in various surface textures including smooth. Dimensions are noted in [Table 1](#) of this report. Fasteners are installed with a minimum $\frac{3}{8}$ -inch (9.5 mm) edge distance and a minimum 2-inch (51 mm) clearance from corners.

Where a specified level of wind resistance or shear resistance is required, the Shiplap panel siding is attached to framing members, appropriately spaced, with fastener types, lengths, and spacing described in [Table 2a and 3](#) of this report.

3.3 LINING BOARD AND UNDERLAYMENT

Titan® panel, Hardibacker® and Hardibacker500® (ceramic tile backerboards), and Hardibacker® underlayment are used as wet or dry area lining/underlayment substrates applied to the interior of buildings. Titan®-FR (tapered-edge) panel is only intended for dry interior wall and ceiling applications.

3.3.1 Titan® Panel

Titan® panel is only intended for interior walls and ceilings including shower and bath areas. Subsequent finishing using paint, wallpaper or tile is required as indicated in Sections 3.3.1.1 and 3.3.1.2 of this report. The panel has a smooth finish with tapered edges on the two long dimensions for joint treatment. Dimensions are noted in [Table 1](#) of this report. Maximum shear values are noted in [Table 3](#) of this report.

3.3.1.1 Paint or Wallpaper Finish: Titan® panel is installed with the long dimension either vertical or horizontal to nominal 2 x 4 wood framing members or minimum No. 20 gage (0.0329-inch) steel framing members, spaced a maximum of 24 inches (610 mm) on center with end joints staggered from adjacent courses in both vertical and horizontal applications. To fasten to wood framing members, minimum $1\frac{3}{8}$ -inch (35 mm) long gypsum board nails or minimum 1-inch (25.4 mm) long No. 8 x 0.323-inch (8.2 mm) HD self-drilling, corrosion-resistant, ribbed buglehead screws are used and spaced a maximum of 8 inches (203 mm) on center at all supports. To fasten to metal framing members, minimum 1-inch (25.4 mm) long No. 8 x 0.323-inch (8.2 mm) HD self-drilling, corrosion-resistant, ribbed buglehead screws are used and spaced a maximum of 6 inches (152 mm) on center at all supports. Fasteners shall be located at least $\frac{3}{8}$ -inch (9.5 mm) from board edges, and 2 inches (51 mm), minimum, from lining board corners. Panels are placed with a minimum $\frac{1}{4}$ -inch (6.4 mm) clearance from the floor surface. Metal or PVC corner angles are attached with the above described nails or screws placed approximately 12 inches (305 mm) on center.

A flush-joint procedure is permitted on Titan® panels. Gypsum board joint compounds, complying with ASTM C 474 and C475, shall be troweled into the joints. Paper joint tape is embedded into the wet joint compound and allowed to dry thoroughly. A second coat of joint compound, approximately 8-inches (203 mm) wide, is then applied across the joint and allowed to dry. A third coat of topping compound, 10-inches (254 mm) wide, is applied across the joint. Topping compound shall also be applied over all fastener heads in intermediate locations.

Internal corners are finished by filling with joint compound, working the joint tape into the joint, and applying a second coat of joint compound. A third coat of topping compound is applied over the area.

External corners are treated by filling the joint with joint compound and allowing it to thoroughly dry. Corrosion-resistant metal or PVC corner angles are then fastened to the corner, followed by a second coat of joint compound. When the second coat is completely dry, a third coat of topping compound is applied over the area. Topping compound is also applied over all fastener heads in intermediate locations.

3.3.1.2 Tile Finish: Titan® panel is installed with the long dimension either vertical or horizontal to nominal 2 x 4 wood-framing members or minimum No. 20 gage (0.0329-inch, 0.84 mm) metal framing members spaced 24 inches (610 mm) on center, maximum, with end joints staggered from adjacent courses in both vertical and horizontal applications. To comply with ANSI A108.11, framing members are spaced 16 inches (406 mm) on center, maximum. To fasten to wood framing members, minimum $1\frac{1}{4}$ -inch (32 mm) long, corrosion-resistant (galvanized or stainless steel) roofing nails, or $1\frac{1}{4}$ -inch (32 mm) long No. 8 x 0.375-inch (9.5 mm) HD self-drilling, corrosion-resistant, ribbed waferhead screws are used and spaced a maximum of 6 inches (152 mm) on center at all supports. To fasten to metal framing members, minimum $1\frac{1}{4}$ -inch (32 mm) long No. 8 x 0.375-inch (9.5 mm) HD self-drilling, corrosion-resistant, ribbed waferhead screws are used and spaced a maximum of 6 inches (152 mm) on center at all supports. Fasteners are located at least $\frac{3}{8}$ inch (9.5 mm) from board edges, and 2 inches (51 mm), minimum, from board corners. Corner gaps are filled with a flexible, silicone sealant compatible with fiber-cement. Panels are placed with a minimum $\frac{1}{4}$ -inch (6.4 mm) clearance from the floor surface. This gap shall be free of adhesive and grout and filled with a flexible sealant. On large tiled areas, movement joints are provided in the walls in accordance with ANSI A108, Section AN-3.7.

A flush-joint procedure is permitted on Titan® panel. The same type of tile adhesive or mortar used to set the tiles shall be troweled into joints as a joint compound. Joints shall be reinforced with 2-inch (51 mm) wide, high-strength, coated, alkali-resistant, glass fiber reinforcing joint tape embedded into the wet tile adhesive and allowed to dry thoroughly.

Internal corners are finished by filling with tile adhesive, working the reinforcing joint tape into the joint, and applying a second coat of tile adhesive and allowing it to dry thoroughly.

External corners are treated by filling the joint with tile adhesive and allowing it to dry thoroughly. Corrosion-resistant metal or PVC corner angles are then fastened in place, followed by a second coat of tile adhesive. Tile adhesive is also applied over all fastener heads in intermediate locations.

Wall tiles complying with ANSI A137.1 are attached to the board with flexible Type I, mastic adhesives complying with ANSI A136.1, or acrylic or latex-modified thinset mortars complying with ANSI A118.4, in accordance with ANSI A108. The same adhesives are permitted to fill and level the sheet joints.

3.3.2 Hardibacker® and Hardibacker 500® (Ceramic Tile Backerboard)

Hardibacker® and Hardibacker 500® ceramic tile backerboards are only intended for interior walls and floors, including shower and bath areas (excluding the shower floor). Subsequent finishing with tile is required. The square-edge backerboards have a smooth-finished surface and square edges for closely butted joints. Dimensions are noted in [Table 1](#) of this report. Maximum shear values are noted in [Table 3](#) of this report.

3.3.2.1 Floors: When Hardibacker® or Hardibacker 500® backerboards are used on floors, the subfloor assembly shall consist of a minimum $\frac{5}{8}$ -inch (15.9 mm) thick, Exterior Grade, Group 2 or 3 species plywood or equivalent thickness of subfloor and shall be designed such that the maximum deflection in a plane, including live and dead loads, is $L/360$ of the span, in accordance with the applicable code. Movement joints shall be provided where existing structural joints (building control joints) occur and where changes in direction occur such as in "L"-shaped rooms. For large tiled areas, movement joints are provided in accordance with ANSI A108, Section AN-3.7.

The subfloor is then covered with a minimum $\frac{3}{32}$ -inch (2.4 mm) thick latex, or acrylic-modified thinset setting material. The backerboard is then installed in a staggered brick pattern at right angles to the subfloor and fastened before the setting material films over.

The backerboards are fastened with $1\frac{1}{4}$ -inch (32 mm) long, corrosion-resistant (galvanized or stainless steel) roofing nails or minimum 1-inch (25.4 mm) long No. 8 by 0.323-inch (8.2 mm) HD self-drilling, corrosion-resistant, ribbed buglehead screws. To meet the requirements of ANSI A108.11, minimum $1\frac{1}{4}$ -inch (32 mm) long No. 8 x 0.375-inch (9.5 mm) HD self-drilling, corrosion-resistant ribbed waferhead screws are used. Fasteners shall be located a maximum of 8 inches (203 mm) on center around the perimeter and in the field. Fasteners shall be located a minimum of $\frac{3}{8}$ -inch (9.5 mm) and a maximum of $\frac{3}{4}$ inch (19.1 mm) from the backerboard edges, and 2 inches (51 mm) minimum, from underlayment corners. For latex or acrylic modified thinset mortars, the joints shall be reinforced with 2-inch (51 mm) wide, high-strength, coated, alkali-resistant, glass fiber reinforcing tape embedded into the wet mortar and allowed to dry thoroughly.

Floor tiles complying with ANSI A137.1 are attached to the board with flexible Type I mastic adhesives complying with ANSI A136.1, or acrylic or latex-modified thinset mortars complying with ANSI A118.4, in accordance with ANSI A108. The same adhesives are also used to fill and level the sheet joints.

3.3.2.2 Walls: Hardibacker® and Hardibacker 500® backerboards are installed with the long dimension either vertical or horizontal to nominal 2 x 4 wood framing members or minimum No. 20 gage (0.0329-inch, 0.84 mm) metal framing members spaced a maximum of 24 inches (610 mm) on center with end joints staggered from adjacent courses in both vertical and horizontal applications. To comply with ANSI A108.11, framing members shall be spaced a maximum of 16 inches (406 mm) on center. To fasten to wood framing members, minimum 1¹/₄-inch (32 mm) long, corrosion-resistant (galvanized or stainless steel) roofing nails or 1¹/₄-inch (32 mm) long No. 8 by 0.375-inch (9.5 mm) HD self-drilling, corrosion-resistant, ribbed waferhead screws are used and spaced a maximum of 8 inches (152 mm) on center at all supports. To fasten to metal framing members, minimum 1¹/₄-inch (32 mm) long No. 8 by 0.375-inch (9.5 mm) HD self-drilling, corrosion-resistant ribbed waferhead screws are used and spaced a maximum of 8 inches (152 mm) on center at all supports. Fasteners are located at least 3³/₈ inch (9.5 mm) from board edges and 2 inches (51 mm), minimum, from board corners. Corner gaps are filled with a silicone sealant compatible with fiber-cement underlayments. Underlayments are placed with a minimum 1¹/₄-inch (6.4 mm) clearance from the floor surfaces and other horizontal tile termination locations, such as above tub edges. This gap shall be free of adhesive and grout and filled with a flexible sealant. For large tiled areas, movement joints are provided in accordance with ANSI A108, Section AN-3.7.

Wall tiles complying with ANSI A137.1 are attached to the underlayment with flexible Type I mastic adhesives complying with ANSI A136.1, or acrylic or latex-modified thinset mortars complying with ANSI A118.4, in accordance with ANSI A108. The same adhesives are used to fill and level the sheet joints. Joints shall be reinforced with 2-inch (51 mm) wide, high-strength, coated, alkali-resistant, glass fiber reinforcing tape embedded into the wet mastic or modified thinset mortar and allowed to dry thoroughly.

3.3.3 Hardibacker® Underlayment (Ultraboard®)

Hardibacker® underlayment is only intended for interior floors including showers and bath areas (excluding the shower floor). Subsequent finishing with resilient floor covering or tile is required. The underlayment face has a smooth surface, an acrylic based seal coat and square edges for close-butted joints. The reverse side of the underlayment has lightly textured surface, is unsealed and has square edges. Dimensions are noted in [Table 1](#) of this report.

The underlayment shall be installed over a structurally sound subfloor assembly designed to limit the maximum deflection in a plane, including live and dead loads, to $L/360$ of the span, in accordance with the applicable code.

When the underlayment is installed on existing floor construction, floor finishes and subflooring shall be repaired, removed and/or replaced as necessary to create a smooth and level surface. The ability of the existing floor structure and subfloor to support the additional loads of the underlayment and new floor finish shall be substantiated. Alterations shall comply with applicable codes.

The underlayment boards are laid in a staggered end joint pattern at right angles to the subflooring. Joints are offset 1¹/₈ inch (3.2 mm) from walls and cabinet bases and cut edges turned to the outside, wherever possible.

3.3.3.1 Resilient Flooring: With the smooth face up, the underlayment is placed over the prepared subflooring and fastened to support framing with either 3d, corrosion-resistant, ring shank nails or No. 18 gage (0.0475-inch) corrosion-resistant staples with a 1¹/₄-inch (6.4 mm) crown located a maximum of 3 inches (76 mm) on center around the perimeter and 6 inches (152 mm) on center in a random/staggered pattern in the field. Fasteners shall be located at least 3³/₈ inch (9.5 mm) from underlayment edges and 2 inches (51 mm) minimum, from the underlayment corners. Fastener heads shall be flush with the surface. Fasteners shall be of sufficient length to penetrate at least 1-inch (25.4 mm) sound subflooring or framing.

To minimize the possibility of surface irregularities in the underlayment and fastener heads penetrating through the resilient flooring, the boards shall be installed flush and level. Height variations are treated by filling joints, gouges and low spots with a water-resistant, cementitious leveling compound recommended by the floor-covering manufacturer. After the leveling compound has dried, filled areas are sanded level to the surrounding subfloor.

Prior to the application of the resilient flooring, the prepared surfaces shall be free of dust, grease and other foreign material.

Finish floor coverings are installed in accordance with the flooring material manufacturer's published instructions, which shall include application procedures, compatible adhesives and recommended accessories.

3.3.3.2 Tile: With the smooth face up, follow the additional instructions described in Section 3.3.2.1 of this report.

3.3.4 Titan®-FR Panel Titan®-FR (tapered-edge) panel is only intended for dry interior wall and ceiling applications. The panel has a smooth finish with tapered edges on the two long dimensions for joint treatment. Dimensions are as noted in [Table 1](#) of this report.

3.3.4.1 Paint or Wallpaper Finish: Titan®-FR tapered-edge panel is installed with the long dimension either vertical or horizontal to nominal 2 x 4 wood framing members or minimum No. 20 gage (0.0329-inch, 0.84 mm) steel framing members, spaced a maximum of 24 inches (610 mm) on center with end joints staggered from adjacent courses in both vertical and horizontal applications. To fasten to wood framing members, minimum 1¹/₈-inch (47.6 mm) long gypsum board nails or minimum 1¹/₂ inch (38 mm) long, Type W, gypsum board screws are used and spaced a maximum of 8 inches (203 mm) on center at all supports. To fasten to metal framing members, minimum 1 inch (25.4 mm) long, Type S or S-12, self-drilling gypsum board screws are used and spaced a maximum of 12 inches (305 mm) on center at all supports. Fasteners shall be located at least 3³/₈ inch (9.5 mm) from board edges, and 2 inches (51 mm), minimum, from board corners. wall panels are placed with a minimum 1¹/₄-inch (6.4 mm) clearance from the floor surface. Metal or PVC corner angles are attached with the above described nails or screws placed approximately 12 inches (305 mm) on center.

A flush-joint procedure is permitted on Titan®-FR (tapered-edge) panels. Gypsum board joint compounds, complying with ASTM C 474 and C 475, shall be troweled into the joints. Paper joint tape or equivalent is embedded into the wet joint compound and allowed to dry thoroughly. A second coat of joint compound, approximately 8 inches (203 mm) wide, is then applied across the joint and allowed to dry. A third coat of topping compound, 10 inches (254 mm) wide, is applied across the joint. Topping compound shall also be applied over all fastener heads in intermediate locations.

Internal corners are finished by filling with joint compound, working the joint tape into the joint, and applying a second coat of joint compound. A third coat of topping compound is applied over the area.

External corners are treated by filling the joint with joint compound and allowing it to dry thoroughly. Corrosion-resistant metal or PVC corner angles are then fastened to the corner, followed by a second coat of joint compound. When the second coat is completely dry, a third coat of topping compound is applied over the area. Joint compound is also applied over all fastener heads in intermediate locations.

3.4 SUBFLOOR PANELS

Compressed sheet is used as subflooring over complying wood or metal floor joists spaced a maximum of 24 inches (610 mm) on center. The panels have a smooth unsanded surface. Cutouts for plumbing and electrical shall be oversized. Floor opening penetrations shall be protected in accordance with the applicable code. Dimensions are noted in [Table 1](#) of this report.

Panels are installed over two or more spans, with the long dimension perpendicular to supports. The sheets are fastened to wood framing members by counterstriking minimum No. 10 x 0.350-inch (8.9 mm) HD wood screws spaced a maximum of 12 inches (305 mm) on center at all supports. The sheets are fastened to metal framing members by counterstriking minimum No. 9 by 0.350-inch (8.9 mm) HD self-drilling, corrosion-resistant ribbed buglehead screws spaced a maximum of 6 inches (152 mm) on center around the sheet perimeter and 12 inches (305 mm) on center at immediate joist locations. Fasteners shall be of sufficient length to penetrate at least 1 inch (25.4 mm) into wood framing members or $\frac{1}{4}$ inch (6.4 mm) into metal framing members. Holes are drilled in compressed sheet with a masonry bit, allowing a 0.04-inch (1.02 mm) clearance over diameter of screw to be used. Fasteners are located a minimum of $\frac{3}{8}$ inch (9.5 mm) and a maximum of $\frac{3}{4}$ inch (19.1 mm) from sheet edges, and 2 inches (51 mm) minimum from sheet corners. Fastener heads are flush with the surface. Edges shall be blocked or the panels shall be covered with minimum $\frac{1}{4}$ -inch (6.4 mm) thick underlayment or $\frac{3}{4}$ -inch (19.1 mm) thick wood strip finish flooring.

As an alternative, sheets are field glued in conjunction with mechanical fastening with a structural adhesive (APA/HUD AFG-01) applied to joints. Framing members shall be free of surface moisture, dirt, cement and other foreign materials prior to application of the adhesive. Adhesives shall be applied in accordance with the adhesive manufacturer's instructions. The application rate shall be a $\frac{1}{4}$ -inch (6.4 mm) diameter bead applied to each joist or blocking member, except two $\frac{1}{4}$ -inch (6.4 mm) diameter beads are applied where sheets abut on a joist. Installation of the sheets shall be within the time limit designated by the adhesive manufacturer.

Where more than one sheet is used, an effective seal shall be provided between sheets. The bonded surfaces shall be clean and an approved structural adhesive (APA/HUD AGF-01) shall be used. Edges of the sheets to be joined shall be thoroughly cleaned and the dust removed. A layer of adhesive is "buttered" to the leading edge of the first installed sheet and the next sheet laid against it ensuring that an adequate film of adhesive is present. Forcing adhesive into the joint after the sheets have been fastened is not permitted. After the joint is filled, any excess adhesive shall be removed from the surface of the sheet.

Use as a diaphragm is outside the scope of this report.

Allowable loads are as follows:

ALLOWABLE UNIFORM LOAD AT DEFLECTION LIMIT = $L/360$ ¹

PRODUCT	JOIST SPACING	
	16 inches o.c.	24 inches o.c.
Compressed Sheet II ($\frac{1}{2}$ and $\frac{5}{8}$ -inch thick)	190 psf	105 psf
Compressed Sheet II ($\frac{3}{4}$ -inch thick)	300 psf	145 psf

For SI: 1 inch = 25.4 mm, 1 psf = 47.88 Pa
1. L = length of span (inches)

3.5 FIRE-RESISTANCE RATED ASSEMBLIES

3.5.1 Assembly 1

The nonsymmetrical nonloadbearing, 1 hour, fire-resistance rated wall assembly consists of minimum $3\frac{5}{8}$ -inch (92 mm) deep, No. 20 gage (0.0359-inch, 0.91 mm), steel "C" studs at 24 inches (610 mm) on center with corresponding top and bottom tracks. One layer of $\frac{5}{8}$ -inch (15.9 mm) thick Type "X" gypsum board, 48 inches (1219 mm) wide, is applied vertically to the studs and secured with $\frac{1}{4}$ -inch (32 mm) long, Type S, gypsum board screws, spaced 8 inches (203 mm) on center at board edges and 12 inches (305 mm) on center at intermediate framing members. The $\frac{5}{8}$ -inch (15.9 mm) thick gypsum board joints and screw heads require treatment consisting of joint compound followed by joint tape and a second layer of joint compound. The opposite face of the wall is covered with one layer of $\frac{1}{2}$ -inch (12.7 mm) thick Hardirock[®] Max "C"[™](Type "X") gypsum board, followed by one layer of either $\frac{1}{4}$ -inch (6.4 mm) thick Titan[®] (tapered-edge), Hardibacker[®] (square-edge), or Harditex[®] board. Boards are applied vertically to framing members with vertical edges staggered 24 inches (610 mm). The $\frac{1}{2}$ -inch (12.7 mm) thick Hardirock[®] Max "C"[™] (Type "X") gypsum board is fastened to the framing members with $\frac{1}{4}$ -inch (32 mm) long, Type S, gypsum board screws spaced 24 inches (610 mm) on center. Titan[®], Hardibacker[®] or Harditex[®] boards are fastened through the gypsum board to the framing members with minimum $1\frac{5}{8}$ -inch (41 mm) long by minimum 0.323-inch (8.2 mm) HD or self-drilling, corrosion-resistant, ribbed buglehead or ribbed waferhead screws located a maximum of 8 inches (203 mm) on center. Board joints and fasteners require treatment similar to that described in Sections 3.3.1.1, 3.3.1.2, 3.3.2.2 and 3.2.4 of this report.

3.5.2 Assembly 2

The nonsymmetrical nonload bearing, 1-hour, fire-resistant rated wall assembly consists of minimum $3\frac{5}{8}$ -inch (92 mm) deep, No. 25 gage (0.0209-inch, 0.53 mm), steel "C" studs at 16 inches (406 mm) on center with corresponding top and bottom tracks. One layer of $\frac{5}{8}$ -inch (15.9 mm) thick Type "X" gypsum board, 48 inches (1219 mm) wide, is applied vertically to the studs and secured with minimum 1 inch (25.4 mm) long, Type S, gypsum board screws, spaced 8 inches (203 mm) on center at board edges and 12 inches (305 mm) on center at intermediate framing members. The $\frac{5}{8}$ -inch (15.9 mm) thick Type "X" gypsum board joints and screw heads require treatment consisting of joint compound followed by joint tape and a second layer of joint compound. The stud cavities are insulated with minimum 3-inch (76 mm) thick, 3 pcf (48 kg/m³), unfaced, friction-fit, mineral fiber insulation complying with ASTM C 665, Type I. The opposite face of the wall is covered with one layer of $\frac{7}{16}$ -inch (11.1 mm) thick Hardibacker[®] (backerboard) or Titan[®] panel or Harditex[®] boards. The boards are applied vertically to framing

members with vertical edges staggered 16 inches (406 mm). Hardibacker®, Titan® or Harditex® boards are fastened through to the framing members with minimum 1-inch (25.4 mm) long No. 8 by 0.323-inch (8.2 mm) HD self-drilling, corrosion-resistant, ribbed buglehead (or equivalent) screws located a maximum of 6 inches (152 mm) on center. Board joints and fasteners require treatment similar to that described in Sections 3.3.1.1, 3.3.1.2 or 3.3.2.2 of this report, and using the glass fiber reinforcing tape.

3.5.3 Assembly 3

The nonsymmetrical limited loadbearing, 1 hour fire-resistant rated wall assembly consists of nominal 2 x 4 wood studs at 16 inches (406 mm) on center with two top plates and a single bottom plate. The lesser of 800 pounds per stud or 31 percent of full design load is permitted to be superimposed, provided structural consideration for axial, flexural and bearing perpendicular-to-grain stresses are resolved in accordance with Part III of the *National Design Specification*, 1997 edition, published by the American Forest & Paper Association. One layer of $\frac{5}{8}$ -inch (15.9 mm) thick Type "X" gypsum board, 48 inches (1219 mm) wide, is applied vertically to the studs and secured with minimum $1\frac{7}{8}$ -inch (22 mm) long cup-head gypsum board nails, spaced 7 inches (178 mm) on center at board edges and intermediate framing members. The $\frac{5}{8}$ -inch (15.9 mm) thick Type "X" gypsum board joints and nail heads require treatment consisting of joint compound followed by joint tape and a second layer of joint compound. The stud cavities are insulated with minimum 3-inch (76 mm) thick, 3 pcf, unfaced, friction-fit, mineral fiber insulation complying with ASTM C 665, Type I. The opposite face of the wall is covered with one layer of $\frac{7}{16}$ -inch (11.1 mm) thick Titan® panel or Hardibacker® backerboard. The fiber cement board is applied vertically to framing members with vertical edges staggered 16 inches (406 mm) from the gypsum board edges. Boards are fastened through to the framing members with minimum $1\frac{1}{2}$ -inch (38 mm) long, corrosion-resistant roofing nails located a maximum of 6 inches (152 mm) on center. Board joints and fasteners require treatment similar to that described in Section 3.3.2.2 of this report. The side of the wall clad with fiber-cement board is covered with standard grade ceramic tile, nominal $\frac{1}{4}$ -inch (6.4 mm) thick. Tiles, any expansion or control joints, and grout are installed in accordance with ANSI A108.4 when Type I organic adhesive is used, or ANSI A108.5 if dry set, acrylic-modified or latex-modified portland cement mortar is used.

3.5.4 Assembly 4

The nonsymmetrical loadbearing 1 hour fire-resistant rated wall assembly consists of nominal 2 x 4 wood studs at 24 inches (610 mm) on center with two top plates and a single bottom plate. Full design loads are permitted to be superimposed, provided structural consideration for axial flexural and bearing perpendicular-to-grain stresses are resolved in accordance with Part III of the *National Design Specification*, 1997 Edition, published by the American Forest & Paper Association. One layer of $\frac{5}{8}$ -inch (15.9) thick Type "X" gypsum board, 48 inches (1219 mm) wide, is applied vertically to the studs and secured with minimum $1\frac{3}{4}$ -inch (44 mm) long cup-head gypsum board nails, spaced 7 inches (178 mm) on center at board edges and intermediate framing members. The $\frac{5}{8}$ -inch (15.9 mm) thick Type "X" gypsum board joints and nail heads require treatment consisting of joint compound followed by joint tape and a second layer of joint compound. The stud cavities are either insulated or uninsulated. The opposite face of the wall is covered with one layer of $\frac{1}{2}$ -inch (12.7 mm) thick Type "X" water-resistant core gypsum sheathing and one layer of maximum 12-inch (305 mm) wide Hardiplank® lap siding lapped a minimum of $1\frac{1}{4}$ inches (32 mm). The $\frac{1}{2}$ -inch (12.7 mm) thick Type "X" water-

resistant core gypsum sheathing is applied vertically to framing members with vertical edges staggered 24 inches (610 mm) from the joints on the opposite side. The $\frac{1}{2}$ -inch (12.7 mm) thick Type "X" water-resistant core gypsum sheathing is fastened to the framing members with $1\frac{3}{4}$ -inch (44 mm) long roofing nails spaced 7 inches (178 mm) on center in the field and 4 inches (102 mm) on center along the perimeter of each board. An outer layer of $\frac{5}{16}$ -inch (7.5 mm) thick, 12-inch (305 mm) wide Hardiplank® lap siding is applied over the $\frac{1}{2}$ -inch (12.7 mm) thick Type "X" water-resistant core gypsum sheathing by attaching a $1\frac{1}{2}$ -inch (38 mm) wide Hardiplank® starter strip attached through the gypsum sheathing into the bottom plate and 12-inch (305 mm) wide Hardiplank® lap siding applied horizontally with a minimum nominal $1\frac{1}{4}$ -inch (32 mm) headlap and fastened with a single 6d corrosion resistant common nail driven through the lapped planks at each stud.

3.5.5 Assembly 5

The symmetrical nonload bearing, 1 hour, fire-resistant rated wall assembly consists of minimum 3 $\frac{5}{8}$ -inch (92 mm) deep, No. 20 gage (0.0359 inch, 0.91 mm), steel "C" studs at 24 inches (610 mm) on center with corresponding top and bottom tracks. Both sides of the wall are covered with one layer of $\frac{1}{2}$ -inch (12.7 mm) thick Hardirock® Max "C"™ (Type "X") gypsum board, followed by one layer of either $\frac{1}{4}$ -inch (6.4 mm) thick Titan® panel, Hardibacker® backerboard, or Harditex® baseboards. Boards are applied either perpendicular (horizontally) or parallel (vertically) to framing members. Base layer and face layer board joints of both wall sides are offset by 24 inches (610 mm). The $\frac{1}{2}$ -inch (12.7 mm) thick Hardirock® Max "C"™ (Type "X") gypsum board is fastened to the framing members with minimum 1-inch (25.4 mm) long, Type S, gypsum board screws spaced 24 inches (610 mm) on center. Titan®, Hardibacker® or Harditex® boards are fastened through the gypsum board to the framing members with minimum $1\frac{5}{8}$ -inch (41 mm) long by minimum 0.323-inch (8.2 mm) HD self-drilling, corrosion-resistant, ribbed buglehead or ribbed waferhead screws located a maximum of 8 inches (203 mm) on center. Board joints and fasteners require finish treatment similar to that described in Sections 3.3.1.1, 3.3.1.2, 3.3.2.2, or 3.2.4 and of this report.

3.5.6 Assembly 6

The symmetrical nonload bearing, 1 hour, fire-resistant rated wall assembly consists of minimum 3 $\frac{5}{8}$ -inch (92 mm) deep, No. 20 gage (0.0359 inch, 0.91 mm), steel "C" studs at 24 inches (610 mm) on center with corresponding top and bottom tracks. Both sides of the wall are covered with one layer of $\frac{5}{8}$ -inch (15.9 mm) thick Titan®-FR panel. Boards are applied either perpendicular (horizontally) or parallel (vertically) to framing members. Panel joints are offset by 24 inches (610 mm). The $\frac{5}{8}$ -inch (15.9 mm) thick Titan®-FR panel is fastened to the framing members with minimum 1 inch (25.4 mm) long, Type S, gypsum board screws spaced 12 inches (305 mm) on center. Board joints and fasteners require finish treatment similar to that described in Sections 3.3.1.1 or 3.3.1.2 of this report.

4.0 INSTALLATION

Installation shall comply with this report and a copy of this report shall be available at all times on the job site during installation. Additional details are in the applicable manufacturer's product information sheets issued December 1993. Where non-editorial differences occur between the manufacturer's product information sheets and this report, this report shall be null and void.

5.0 IDENTIFICATION

James Hardie Building Products, Inc., Hardiflex[®], Hardipanel[®], Cempanel[®], Hardisoffit[®] and Cemsoffit[®] boards; Harditex[®] baseboards; Titan[®], Titan[®]-FR, Hardibacker[®], Ultraboard[®] and Hardibacker 500[®] lining boards, backerboard and underlayment; Compressed Sheet subflooring; pallets of Hardiplank[®] and Cemplank[®] lap siding; and pallets of Hardishingle[™] planks and panels shall bear a label identifying the manufacturer's name and telephone number, the product name, and the name of the quality control agency, Intertek Testing Services, Inc. (NER-QA219), and this ICC-ES Legacy report number (NER-405) for field identification.

6.0 EVIDENCE SUBMITTED

6.1 The following test reports issued by the Building Research Association of New Zealand (BRANZ) in accordance with ASTM E 72, Conducting Strength Test of Panels of Building Construction, Section 9, Transverse Load, and Section 14, Racking Load:

Report No.	Date	ASTM Standard Section
S100	June, 1984	9
S101	June, 1984	9
S102	June, 1984	9
S103	June, 1984	9
S104	June, 1984	9
S105	June, 1984	14
S106	June, 1984	14
S109	July, 1984	9
S112	August, 1984	14
S113	August, 1984	9
STR122	April, 1985	9
STR123	April, 1985	14
STR127	April, 1985	9
STR128	May, 1985	14
STR131	May, 1985	9
STR132	May, 1985	14

6.2 The following test reports issued by the Building Research Association of New Zealand (BRANZ) in accordance with the weatherability test procedures noted:

Report No.	Date	Procedure
MTR658	November, 1983	U.B.C. Standard 32-12
MTR662	November, 1983	Freeze/Thaw
MTR709	June, 1984	Percolation Test
MTR723	May, 1984	ASTM G 26, D 2616, FD-714
MTR778	June, 1985	NSZ3204; Wet/Dry Cycling
MTR787	June, 1985	U.B.C. Standard 47-17
T176	June, 1984	ASTM E 96
T177	June, 1984	ASTM E 96

6.3 Quality Assurance Manual for James Hardie Building Products, Inc., signed by Rich Klein, James Hardie Building Products, Inc. 2/18/02 and Kathy Bishop, Intertek Testing Services, Inc. 2/20/02.

6.4 Manufacturer's descriptive literature.

6.5 United States Testing Company, Test Report No. LA 50049-1, dated February 7, 1985, containing testing in accordance with ASTM E 84, *Test of Surface Burning Characteristic of Building Materials*.

6.6 Ramtech Laboratories, Inc., Test Report No. 8047-87, dated April 6, 1987, containing testing in accordance with ASTM E 72, *Conducting Strength Tests of Panels for Building Construction* — Section 9, Transverse Load; and Section 14, Racking Load.

6.7 Structural Calculations for "Determination of Wind Speed" by Ronald I. Ogawa, P.E., in accordance with Section 1205 of the 1988 *Standard Building Code*.

6.8 The following test reports were issued by Inspection Concepts for "Transverse Load Tests" of panels:

Report No.	Date
IC-1021-88	May, 1988
IC-1022-88	May, 1988
IC-1042-88	February, 1989
IC-1054-89	September, 1989
IC-1055-89	September, 1989
IC-1121A-91	March 20, 1991
IC-1121B-91	March 20, 1991
IC-1201-92	January 22, 1993
IC-1203-92	January 22, 1993
IC-1228-93	July 2, 1993
IC-1270-94	April 20, 1994
IC-1271-94	April 20, 1994

6.9 The following test reports were issued by Inspection Concepts for "Racking Tests" of panels:

Report No.	Date
IC-1013-88	January, 1988
IC-1014-88	January, 1988
IC-1030-88	September, 1988
IC-1032-88	September, 1988
IC-1037-88	November, 1988
IC-1038-88	November, 1988
IC-1057-89	September, 1989
IC-1062-89	November, 1989
IC-1100-90	October 30, 1990
IC-1107-91	January 5, 1991
IC-1108-91	January 6, 1991
IC-1109-91	January 8, 1991
IC-1110-91	January 8, 1991
IC-1120A-91	March 20, 1991
IC-1120B-91	March 20, 1991
IC-1120C-91	March 20, 1991
IC-1120D-91	March 20, 1991
IC-1202-92	January 22, 1993
IC-1202-92	January 22, 1993
IC-1237-93	August 5, 1993
IC-1273-94	April 20, 1994
IC-1274-94	April 29, 1994

6.10 The following test reports were issued by Inspection Concepts for "Transverse Load Tests" of planks:

Report No.	Date
IC-1020-88	May, 1988
IC-1011-88	January, 1988
IC-1034-88	October, 1988
IC-1035-88	October, 1988

- 6.11 The following test reports were issued by Southwest Research Institute for "1 hour Fire-resistant Assemblies":

Report No.	Date
01-2602-802	March, 1989
01-2602-803	March, 1989

- 6.12 Structural calculations verifying design values for **Table 2 and 3** of this report, prepared by Inspection Concepts dated March 7, 1990, signed and sealed by Ronald I. Ogawa, P.E.
- 6.13 Inspection Concepts, Test Report No. IC-1093A-90, dated October 18, 1990, in accordance with ASTM E 136.
- 6.14 Smith-Emery Company, Test Report No. L-87-1732, dated October 8, 1987, in accordance with ANSI A118.9.
- 6.15 United States Testing Company, Inc., Test Report No. 176842, dated September 14, 1990, in accordance with ASTM D 1037.
- 6.16 Truesdail Laboratories, Inc., Test Report No. 30240-1, dated March 1, 1989, revised March 28, 1991, in accordance with ASTM G 21.
- 6.17 Truesdail Laboratories, Inc., Test Report No. 30240-2, dated March 1, 1989, revised March 28, 1991, in accordance with ASTM G 22.
- 6.18 Inspection Concepts, Report No. IC-1131-91, dated May 8, 1991, in accordance with ASTM C 947, C666 Procedure B, and ANSI 136-1.
- 6.19 ETL Testing Laboratories, Report No. 497742, dated March 5, 1990, in accordance with ASTM E 84.
- 6.20 Inspection Concepts, Report No. IC-1039-89, dated January 6, 1989, revised May 11, 1990, containing comparative fastener pullout and pull-through testing results.
- 6.21 James Hardie Building Products, Inc. product information sheets issued October 1991.
- 6.22 Structural calculations verifying design values for **Table 2 and 3** of this report, prepared by Inspection Concepts dated October 20, 1993, signed by Ronald I. Ogawa, P.E.
- 6.23 Letter correcting structural calculations for BRANZ Reports S106 and STR128 prepared by Inspection Concepts dated February 14, 1993, signed and sealed by Ronald I. Ogawa, P.E.
- 6.24 Letter reviewing "Racking Tests" and "Transverse Load Tests" for Group III wood species verification for **Table 2 and 3** of this report, prepared by Inspection Concepts dated October 14, 1993, signed and sealed by Ronald I. Ogawa, P.E.

- 6.25 The following test reports were issued by Omega Point Laboratories for "1 hour Fire-resistant Assemblies":

Report No.	Date
11710-92783	February 13, 1992
11710-92851	September 9, 1992
11710-98414	May 1, 1995
11710-105198	August 2, 1999
11710-105199	August 3, 1999

- 6.26 Ramtech Laboratories, Inc., Test Report No. 8108A-87, dated May 20, 1987, in accordance with ASTM C 725 for flexural strength tests conducted on $1/4$ -inch and $3/4$ -inch thick compressed sheet panels.
- 6.27 Ramtech Laboratories, Inc., Test Report No. 8108B-87, dated May 26, 1987, in accordance with ASTM E 72, Section 18, concentrated load on $1/4$ -inch and $3/4$ -inch thick compressed sheet panels.
- 6.28 Ramtech Laboratories, Inc., Test Report No. 8108C-87, dated June 24, 1987, in accordance with ASTM E 72, Section 9, transverse load on $1/4$ -inch and $3/4$ -inch thick compressed sheet panels.
- 6.29 Inspection Concepts, Test Report No. IC-1257-94, dated January 13, 1994, in accordance with ASTM E 331 for water penetration of $1/4$ -inch thick Hardi-panel® vertical siding.
- 6.30 Inspection Concepts, Test Report No. IC-1243-93, dated August 26, 1993, in accordance with ASTM E 228 for linear-thermal expansion of $1/4$ -inch thick James Hardie fiber cement products.
- 6.31 Ramtech Laboratories, Inc., Laboratory No. 9778-93, IC-1225-93, dated June 4, 1993,. The Hardibacker board was tested in accordance with ASTM C 177 *Test for Steady-State Thermal Transmission Properties by Means of the Guarded Hot Plate*. The results are listed in **Table 4** of this report.
- 6.32 Ramtech Laboratories, Inc., Test Report No. IC-1230-93, Laboratory No. 9778-93, dated June 1993. The Hardibacker® board materials were tested in accordance with ASTM E 96-90 to determine the water vapor transmission properties. The average permeance (perms) of the panels are shown in **Table 5** of this report.
- 6.33 Ramtech Laboratories, Inc. Laboratory No. 10367A-95/1363, dated September 18, 1995. The 7 $1/4$ -inch and 9 $1/4$ -inch wide Hardiplank® lap sidings were tested in accordance with ASTM E 330 Transverse Load Test. The panels were installed on nominal 2 x 4 wood structural members spaced 16 inches on center (o.c.).
- 6.34 Structural Calculations verifying design values for **Table 3** of this report, prepared by Inspection Concepts dated October 6, 1995, signed by Ronald I. Ogawa, P.E.
- 6.35 Wind analysis and calculations for Hardishingle and Hardislate roofing and Hardie® Shingleside® cladding installed with 8-, 7-, and 6-inch weather exposures. Analysis and calculations conducted by Ronald I. Ogawa, P.E. dated March 28, 1997; March 31, 1997; and April 2, 1997.

- 6.36** Structural calculations to determine design wind load on 8.25 Hardiplank®, dated October 24, 1996, signed and sealed by Ronald I. Ogawa, P.E. of Inspection Concepts Inc..
- 6.37** Structural calculations to determine design values for **Table 2a, 2b, and 3** of this report, prepared by Inspection Concepts dated July 16, 1997, July 19, 1997, and August 19, 1997, signed and sealed by Ronald I. Ogawa, P.E.
- 6.38** Ramtech Laboratories, Inc., Report Lab. No. 10868-97/1475, dated June 26, 1997. The report contains results of testing in accordance with ASTM E 72 and ASTM E 330 on $5/16$ -inch thick Hardipanel.
- 6.39** Ramtech Laboratories, Inc., Report Lab. No. 10869-97/1482, dated July 14, 1997 containing results of transverse load testing in accordance with ASTM E 72 on $9 1/4$ -inch wide Hardiplank® lap siding.
- 6.40** Applied Research Laboratories, Lab No. 29278-UD1, dated September 1, 1994, containing reports of tensile pull-out testing of fasteners.
- 6.41** Structural calculations to determine the allowable fastener spacing based on a wind speed of 110 mph, Exposure Category C, prepared by Inspection Concepts, dated November 2, 1994, signed and sealed by Ronald I. Ogawa, P.E.
- 6.42** Ramtech Laboratories, Inc., Laboratory Number 10794-97/1458, dated March 13, 1997, containing results of an Uplift Resistance Test of 18-inch long by 12-inch wide by $1/4$ -inch thick Hardishingle™ roofing installed on $15/32$ -inch thick, 4 ply, 3 layer CDX plywood.
- 6.43** Ramtech Laboratories, Inc., Laboratory Number 10794-97/1460, dated March 13, 1997, containing results of an Uplift Resistance Test of 18-inch long by 12-inch wide by $1/4$ -inch thick Hardie® Shingleside® as siding roofing installed on $7/16$ -inch thick Oriented Strand Board utilizing 2 siding nails per 12-inch wide panel.
- 6.44** Ramtech Laboratories, Inc., Laboratory Number 10794-97/1464, dated March 13, 1997, containing results of an Uplift Resistance Test of 18-inch long by 12-inch wide by $1/4$ -inch thick Hardie® Shingleside® as siding roofing installed on $7/16$ -inch thick Oriented Strand Board utilizing 3 siding nails per 12-inch wide panel.
- 6.45** Ramtech Laboratories, Inc., Laboratory Number 11149-98/1554, dated October 7, 1998, containing results of an ASTM E 330 Transverse Load Test of $6 1/4$ -inch wide Hardiplank® siding installed on 20-ga. metal framing members spaced at 16-inch and 24-inch centers and fastened with ET & F pin fasteners through the lap to each stud.
- 6.46** Ramtech Laboratories, Inc., Laboratory Number 11149-98/1554A, dated October 7, 1998, containing results of an ASTM E 330 Transverse Load Test of 12-inch wide Hardiplank® siding installed on 20-ga. metal framing members spaced at 16-inch and 24-inch centers and fastened with ET & F pin fasteners through the lap to each stud.
- 6.47** Ramtech Laboratories, Inc., Laboratory Number 11149-98/1554B, dated October 7, 1998, containing results of an ASTM E 330 Transverse Load Test of $8 1/4$ -inch wide Hardiplank® siding installed on 20-ga. metal framing members spaced at 16-inch and 24-inch centers and fastened with ET & F pin fasteners blind nailed to each stud.
- 6.48** Ramtech Laboratories, Inc., Laboratory Number 11284-99/1580, dated April 15, 1999, containing results of an ASTM E 72 Racking Shear Test of $5/16$ -inch thick x 48-inch wide x 96-inch long Hardipanel® siding installed on 20-ga. metal framing members spaced at 16-inch and 24-inch centers and fastened with ET & F pin fasteners spaced at 4 inches o.c. perimeter and 8 inches o.c. intermediate framing members.
- 6.49** Ramtech Laboratories, Inc., Laboratory Number 11149-98/1554D, dated September 14, 1998, containing results of an ASTM E 330 Transverse Load Test of $5/16$ -inch thick x 48-inch wide x 96-inch long Hardipanel® siding installed on 20-ga. metal framing members spaced at 16-inch and 24-inch centers and fastened with ET & F pin fasteners spaced at 4 inches o.c. perimeter and 8 inches o.c. intermediate framing members.
- 6.50** Wind analysis and calculations for Hardipanel® panels for exposure categories B, C, and D. Analysis and calculations signed and sealed by Ronald I. Ogawa, P.E., dated March 26, 2000.
- 6.51** Ramtech Laboratories, Inc., Laboratory Number 11552/1636, dated April 20, 2000, containing results of an ASTM E 330 Uplift Resistance Test of $1/4$ -inch thick x 24-inch wide vented Hardisoffit® panel installed on nominal 2 x 4 framing members spaced at 24 inch centers and fastened with $1 1/4$ -inch long x 0.083 inch shank x 0.187 inch HD nails spaced at 8 inches o.c. perimeter and intermediate framing members.
- 6.52** Wind analysis and calculations for 24-inch wide vented Hardisoffit® panel for exposure categories B, C, and D. Analysis and calculations signed and sealed by Ronald I. Ogawa, P.E., dated May 4, 2000.
- 6.53** Ramtech Laboratories, Inc., Laboratory Number 11436-99/1602, dated October 29, 1999, containing results of an ASTM E 330 Transverse Load Test of $1/4$ -inch thick x 19-inch long x 48-inch wide Heritage™ (half round) panel siding installed on $7/16$ -inch thick APA rated Oriented Strand Board sheathing only with $1 1/4$ -inch long x 0.083-inch shank x 0.187-inch HD nails spaced at $13 3/4$ -inch o.c.
- 6.54** Ramtech Laboratories, Inc., Laboratory Number 11436-99/1603, dated October 27, 1999, containing results of an ASTM E 330 Transverse Load Test of $1/4$ -inch thick x 19-inch long x 48-inch wide Heritage™ (half round) panel siding installed on nominal 2 x 4 framing members spaced at 16-inch centers and fastened with $1 1/4$ -inch long x 0.083-inch shank x 0.187-inch HD nails to each framing member.

- 6.55 Ramtech Laboratories, Inc., Laboratory Number 11436-99/1604, dated October 28, 1999, containing results of an ASTM E 330 Transverse Load Test of $1/4$ -inch thick x 19-inch long x 48-inch wide Heritage™ (half round) panel siding installed on nominal 2 x 4 framing members spaced at 24-inch centers and fastened with $1/4$ -inch long x 0.083-inch shank x 0.187-inch HD nails to each framing member.
- 6.56 Letter justifying horizontal application of panels in accordance with **Table 3** of this report, based on Table 23-II-1 of the 1997 *Uniform Building Code*™ and similar tables in the BOCA® *National Building Code/1999* and 1999 *Standard Building Code*®, prepared by Inspection Concepts Inc., dated October 20, 1999, and signed and sealed by Ronald I. Ogawa, P.E.
- 6.57 Wind analysis and calculations for Hardiplank® lap siding installed with ET & F pin fasteners for exposure categories B, C, and D. Analysis and calculations signed and sealed by Ronald I. Ogawa, P.E., dated December 14, 1998.
- 6.58 Wind analysis and calculations for Hardiplank® lap siding based on various test reports of installations with nail and screw fasteners. Analysis and calculations signed and sealed by Ronald I. Ogawa, P.E., dated July 7, 1998.
- 6.59 Underwriters Laboratories Inc. letter, dated May 29, 1997, recognizing James Hardie Gypsum's $1/4$ -inch thick Hardirock® Max "C"™ gypsum board as an alternative to Super Fire X gypsum board.
- 6.60 Underwriters Laboratories Inc. letter, dated February 23, 2000, recognizing James Hardie® Gypsum's $1/4$ -inch thick Hardirock® Max "C"™ gypsum board as an alternative to Super Fire X gypsum board.
- 6.61 Underwriters Laboratories, Inc., File R8701, Project 96NK16606, dated December 19, 1996, containing results of ANSI/UL 263 (ASTM E 119, NFPA 251), *Fire Tests of Building Construction and Materials*, for $1/4$ -inch thick x 8 feet long x 4 feet wide gypsum board installed on steel columns of 25 MSG steel studs spaced at 12-inch centers and fastened with 3-inch long Type S self-drilling, self-tapping board screws spaced at 12-inch centers in a UL G512 assembly.
- 6.62 Underwriters Laboratories, Inc., File R8701, Project 96NK35820, dated July 23, 1997, containing results of ANSI/UL 263 (ASTM E 119, NFPA 251), *Fire Tests of Building Construction and Materials*, for $5/8$ -inch thick x 144-inch long x 48-inch wide gypsum board installed in a UL X515 floor-ceiling assembly.
- 6.63 Wind analysis and calculations for Shingleside® Heritage™ panels for exposure categories B, C, and D. Analysis and calculations signed and sealed by Ronald I. Ogawa, P.E., dated December 3, 1999.
- 6.64 Ramtech Laboratories, Inc., Laboratory Number 11436-99/1612, dated December 20, 1999, containing results of an ASTM E 72 Racking Shear Test of $5/16$ -inch thick x 48-inch wide x 96-inch long Hardipanel® Shiplap siding installed on nominal 2 x 4 wood framing members spaced at 16-inch centers and fastened with 0.092-inch shank by 0.225-inch HD by 2-inch long nails spaced at 3 inches o.c. perimeter and 8 inches o.c. intermediate framing members.
- 6.65 Ramtech Laboratories, Inc., Laboratory Number 11436-99/1616, dated December 27, 1999, containing results of an ASTM E 72 Racking Shear Test of $5/16$ -inch thick x 48-inch wide x 96-inch long Hardipanel® Shiplap siding installed on nominal 2 x 4 wood framing members spaced at 16-inch centers and fastened with 0.092-inch shank by 0.225 inch HD by 2-inch long nails spaced at 8 inches o.c. perimeter and 8 inches o.c. intermediate framing members.
- 6.66 Wind analysis and calculations of Ramtech Laboratories, Inc., Test Reports Laboratory Number 11436-99/1612 and 11436/1616, prepared by Inspection Concepts dated January 14, 2000, signed and sealed by Ronald I. Ogawa, P.E.
- 6.67 Wind analysis and calculations for Hardipanel® installed on steel studs spaced 16 and 24 inches o.c. Analysis and calculations signed and sealed by Ronald I. Ogawa, P.E., dated June 15, 1999.
- 6.68 Ramtech Laboratories, Inc., Laboratory Number 11436-99/1619, dated January 19, 2000, containing results of a Uniform Negative Transverse Load Test of $5/16$ -inch thick x 48-inch wide x 96-inch long Hardipanel® Shiplap Panel installed on nominal 2 x 4 wood framing members spaced at 16-inch centers and fastened with 0.092-inch shank by 0.225-inch HD by 2-inch long ring shank nails spaced at 3 inches and 8 inches o.c. perimeter and 8 inches o.c. field.
- 6.69 Wind analysis and calculations of Ramtech Laboratories, Inc., Test Report Laboratory Number 11436-99/1619, prepared by Inspection Concepts dated February 4, 2000, signed and sealed by Ronald I. Ogawa, P.E.
- 6.70 Ramtech Laboratories, Inc., Laboratory Number 11443/1613, dated February 10, 2000, containing results of testing, in accordance with ASTM C 36, of $5/8$ -inch thick x 48-inch wide x 120-inch long Titan®-FR panel consisting of $1/4$ -inch thick Hardirock® Max "C"™ gypsum board and $3/32$ -inch thick Hardie® fiber-cement board adhered with PVA adhesive.
- 6.71 Ramtech Laboratories, Inc., Laboratory Number 11443/1613, dated March 25, 2000, revision to report to additionally show compliance with ASTM C 1278.
- 6.72 Ramtech Laboratories, Inc., Laboratory Number 11443/1629, dated March 22, 2000, containing testing of Hardibacker 500® in accordance with ASTM C 1288, *Standard Specification for Discrete Non-Asbestos Fiber-Cement Interior Substrate Sheets*.
- 6.73 Omega Point Laboratories, Report Number 11710-106315, dated March 7, 2000, containing results of surface burning characteristic testing, indicating compliance with ASTM E 84 for the Hardibacker 500® backerboard.
- 6.74 Ramtech Laboratories, Inc., Laboratory Number 11569/1647, dated June 2, 2000, containing results of water tightness testing performed in accordance with ASTM C 1185 on Hardibacker 500®.

- 6.75 Ramtech Laboratories, Inc., Laboratory Number 11569B/1655, dated June 27, 2000, containing results of falling ball impact testing performed in accordance with ASTM D 1037 on Hardibacker 500®.
- 6.76 Ramtech Laboratories, Inc. Laboratory Number 11569A/1654, dated July 10, 2000, containing results of flexural strength testing performed in accordance with ASTM C 947, freeze thaw testing performed in accordance with ASTM C 666, and bacteria resistance testing performed in accordance with ASTM G 22 on the Hardibacker 500®.
- 6.77 Analysis of screw attachment to 20-gage metal studs and calculations by Ronald I. Ogawa, P.E., signed and sealed 10/10/01.
- 6.78 Analysis and wind load and wind speed by analysis of Ramtech Laboratories Report Lab No. IC-1035-88, analysis prepared by Inspection concepts, Inc., 15-Oct-01, signed and sealed by Ronald I. Ogawa, P.E, 10/16/01.
- 6.79 Test report on thermal conductivity under ASTM C 177 for 13/32-inch thick Hardibacker 500, Ramtech Laboratories, Inc., Lab No. 11670/1685, November 29, 2000, signed and sealed by Ronald I. Ogawa, P.E. and signed by David R. Macey.
- 6.80 Test report on moisture vapor transmission under ASTM E 96 for 13/32-inch Hardibacker 500, Ramtech Laboratories, Inc., Lab No. 11639/1674, October 10, 2000, signed and sealed by Ronald I. Ogawa, P.E. and signed by David R. Macey.
- 6.81 Test report equivalency testing for 5/16-inch Hardipanel Cladding with 6-,4-,3- and 2-inch nail spacing on 16- and 24-inch o.c. wood 2x4 studs, Ramtech Laboratories, Inc., Lab No. 11992/1783, January 17, 2002, signed and sealed by Ronald I. Ogawa, P.E. 1/21/02, and David R. Macey, 1/21/02.

7.0 CONDITIONS OF USE

The ICC-ES Subcommittee for the National Evaluation Service finds that James Hardie Building Products, as described in this report, comply with or are suitable alternates to that specified in the 2000 *International Building Code*®, the BOCA® *National Building Code*/1999, the 1999 *Standard Building Code*®, the 1997 *Uniform Building Code*™, the 2000 *International Residential Code*®, the 2002 *Accumulative Supplement to the International Codes*™, and the 1998 *International One and Two Family Dwelling Code*® subject to the following conditions:

- 7.1 James Hardie Building Products listed in this report shall be installed in accordance with this report. This Evaluation Report and the manufacturer's published installation instructions, when required by the code official, shall be submitted at the time of permit application.
- 7.2 Hardiplank® lap siding and Hardishingle™ cladding shingle and panel sidings shall be installed on exterior walls braced in accordance with the applicable code:
- 7.2.1 Section 2305.7 of the BOCA® *National Building Code*.
- 7.2.2 Section 2308.2 of the *Standard Building Code*®.
- 7.2.3 Section 2320.11.3 and 2320.11.4 of the *Uniform Building Code*™.
- 7.2.4 Section 2308.9.3 of the *International Building Code*®.
- 7.2.5 Section R602.10.3 of the *International Residential Code*®.
- 7.2.6 Section 602.10 of the *International One and Two Family Dwelling Code*®.
- 7.3 Design Wind Loads applied to James Hardie Sidings listed in this report shall be determined in accordance with Chapter 16 of the applicable code and shall be less than those shown in the design tables in this report.
- 7.3.1 Design **Tables 2a and 2b** as shown in this report provides allowable capacity in MPH for transverse load conditions for James Hardie Sidings attached to studs. When using the *International Building Code*® the wind speeds must be converted to 3 second gust wind speed (mph) using **Table 1609.3.1** of the IBC and the allowable wind speeds shown in **Tables 2a and 2b** for the column titled BOCA® *National Building Code* (See 7.3.5 below).
- 7.3.2 Design **Table 3** as shown in this report provides allowable shear capacity in plf for James Hardie Sidings.
- 7.3.3 Design **Tables 6A, 6B, 6C, 7A, 7B, 7C, 8A, 8B, 8C** as shown in this report provides allowable capacity in MPH for transverse load conditions for James Hardie Sidings attached to sheathing. When using the *International Building Code*® the wind speeds must be converted to 3 second gust wind speed (mph) using **Table 1609.3.1of** the IBC and the allowable wind speeds shown in **Tables 6A, 7A and 8A** for the BOCA® *National Building Code* (See 7.3.5 below).
- 7.3.4 Design **Tables 9A, 9B, 9C** as shown in this report provides allowable fastener spacing for James Hardiplank Lap Siding attached to CMUs in 110 MPH wind speed. When using the *International Building Code*® fastener spacings shown in **Table 9B** are applicable for a Wind Speed of 130 MPH.

7.3.5

INTERNATIONAL BUILDING CODE®
TABLE 1609.3.1
EQUIVALENT BASIC WIND SPEEDS^{a,b,c}

V_{3s}	85	90	100	105	110	120	125	130	140	145	150	160	170
V_m	70	75	80	85	90	100	105	110	120	125	130	140	150

For SI: 1 mile per hour = 0.44 m/s.

- a. Linear interpolation is permitted.
 b. V_{3s} is the 3 second gust wind speed (mph).
 c. V_m is the fastest mile wind speed (mph).

INTERNATIONAL RESIDENTIAL CODE®
TABLE R301.2.1.3
EQUIVALENT BASIC WIND SPEEDS^a

3-second gust	85	90	100	105	110	120	125	130	140	145	150	160	170
Fastest mile	70	75	80	85	90	100	105	110	120	125	130	140	150

For SI: 1 mile per hour = 1.609 km/h.

- a. Linear interpolation is permitted.

- 7.4** The exterior plank and panel products installed on exterior walls shall be installed over a weather-resistant barrier in accordance with applicable codes.
- 7.4.1** In jurisdictions adopting the *Uniform Building Code™* and the *Standard Building Code®*, Harditex® baseboard is acceptable for use as water repellent panel sheathing. The weather-resistance performance of joints and terminations has not been evaluated.
- 7.5** Compressed sheet of equivalent thickness to Species Group 1 plywood is an acceptable alternative to plywood subflooring specified in:
- 7.5.1** Section 2307.3.3 of the *BOCA® National Building Code*, Table 2307.3.3.
- 7.5.2** Section 2307.6 of the *Standard Building Code®*, Table 2307.6C.
- 7.5.3** Section 2320.9.2 and Table 23-II-F-1 of the *Uniform Building Code™*.
- 7.5.4** Section 2304.7.2 of the *International Building Code®*, Table 2304.7(4).
- 7.5.5** Section R503.2.1.1 of the *International Residential Code®*, Table R503.2.1(2).
- 7.5.6** Section 503.2.1.1 of the *International One and Two Family Dwelling Code®*, Table 503.2.1.1(2).
- 7.6** Use of compressed sheet subfloor as a component of a floor diaphragm is outside the scope of this report.
- 7.7** $5/8$ -inch (15.9 mm) thick Titan®-FR panel is recognized as an alternative to $5/8$ -inch (15.9 mm) thick ASTM C 36, Type "X", gypsum board, or $5/8$ -inch thick ASTM C 1278, Type "X" gypsum fiber panel for use in fire-resistive construction recognized in the above referenced codes.
- 7.8** $5/16$ -inch (7.5 mm) thick Hardipanel® cladding and Harditex® baseboard are recognized as an alternative to $3/8$ -inch (9.5 mm) thick Structural I panel in:
- 7.8.1** Table 2306.4.6.2 of the *BOCA® National Building Code*.
- 7.8.2** Table 2310.2.B of the *Standard Building Code®*.
- 7.8.3** Table 23-II-I-1 of the *Uniform Building Code™*.
- 7.8.4** Table 2306.4.1 of the *International Building Code®*.
- 7.8.5** Table R703.4 of the *International Residential Code®*.
- 7.8.6** Table 703.4 of the *International One and Two Family Dwelling Code®*.
- 7.9** Flashing shall be installed at all penetrations and terminations in accordance with the applicable code.
- 7.10** The products shall be manufactured at the following locations with quality control inspections by Intertek Testing Services, Inc. (NER-QA219):
- Fontana, California
 - Cleburne, Texas
 - Plant City, Florida
 - Tacoma, Washington
 - Rose Hill, NSW, Australia
 - Carole Park, Queensland, Australia
 - Penrose, Auckland, New Zealand
 - Waxahachie, Texas
 - Blandon, Pennsylvania
 - Summerville, South Carolina
 - Peru, Illinois
 - Santiago, Chile
- 7.11** This report is subject to periodic re-examination. For information on the current status of this report, consult the ICC-ES website.

**Table 1
STANDARD NOMINAL PLANK & PANEL DIMENSIONS**

Product Type	Width	Length	Thicknesses (Inches)
Hardiplank	4, 5-1/4, 6, 6-1/4, 7-1/4, 7-1/2, 8, 8-1/4, 9-1/4, 9-1/2, 11-1/4 & 12 inches	12, 14 feet	5/16
Hardisoffit (unvented)	4, 6, 12, 16, 24 & 48 inches	8 & 12 feet	3/16 & 1/4
Hardisoffit (vented)	4, 6, 12, 16 & 24 inches	12 feet	1/4
Hardiflex	48 inches	8, 9 & 10 feet	3/16, 1/4, 5/16 & 3/8
Hardipanel	48 inches	8, 9 & 10 feet	1/4 & 5/16
Harditex	48 inches	8, 9 & 10 feet	1/4, 5/16, 3/8 & 7/16
Hardipanel Shiplap	48-3/4 inches	8, 9 & 10 feet	5/16
Hardibacker (backerboard)	36 & 48 inches	4, 5, 8 feet	1/4 & 7/16
Hardibacker 500 (backerboard)	36 & 48 inches	5, 8, 9, 10 feet	13/32
Titan (tapered edge)	48 inches	8, 9 & 10 feet	1/4 & 7/16
Hardibacker (underlayment)	36 & 48 inches	4, 5 & 8 feet	1/4
Titan-FR	48 inches	8, 9 & 10 feet	5/8
Hardishingle cladding shingles	6, 8, & 12 inches	18 inches	1/4
Hardishingle panel (square & staggered edge)	48 inches	16 inches	1/4
Hardishingle panel (half round)	48 inches	19 inches	1/4
Compressed Sheet	48 inches	8, 9, 10 feet	1/2, 5/8 & 3/4

Notes to Table 1:

1. Plank and panel products are also available in other lengths, widths, and thicknesses by special arrangement.
2. 1 inch = 25.4 mm, 1 ft = 304.8 mm

Table 2a — MAXIMUM WIND SPEED

Product Type	Product Thick. (in.)	Fastener Type	Fastener Spacing (in.)	Frame Type ¹	Stud Spacing (in.)	Height of Bldg (ft)	Maximum Basic Wind Speed (Mph) for Exposure Category								
							Uniform Building Code			Standard Building Code			BOCA National Building Code		
							B	C	D	< 60 ft	C	D	B	C	D
Hardiflex Hardisoffit (unvented)	3/16	4d common 1-1/2 in. long	6	2 x 4 wood	16	20	90	70	-	90	70	-	90	70	-
						40	80		80			80			
						60	70		70			70			
						100	70					70			
Hardipanel Hardiflex Harditex Hardisoffit (unvented)	1/4	4d common 1-1/2 in. long	8	2 x 4 wood	16	20	90		-	90		-	90		-
					24	40	80		80			80			
						60	70		70			70			
						20	70					70			
Hardisoffit (vented)	1/4	0.083" shank x 0.187" HD ringshank nail at 8" o.c. at all bearing	-	2 x 4 SG = 0.40	22.5 max	0-15	150	140	120	150			150	140	110
						20	150	130	120	140			150	130	110
						40	150	130	110	130			150	120	100
						60	150	120	110	120			150	110	100
						100	140	105	100		105	90	130	105	90
Hardipanel Hardiflex Harditex	1/4	6d common 2 in. long	6	2 x 4 wood	16	20	120	100	-	120	120	-	120	100	-
						40	120	95		120	110		120	90	
						60	110	90		120	110		120	90	
						100	100	85		70	70		95	70	
						200	90	80		70	70		80	70	
Hardipanel Hardiflex Harditex	1/4	No. 11 ga. 1-1/4 in. long galvanized roofing nail	6	2 x 4 wood	16	20	110	80	-	110	80	-	110	80	-
						40	105	80		105	80		105	80	
						100	90	70		70	70		90	70	
						150	80	70		70	70		80	70	
						200	80			80	80		80		
Hardipanel Hardiflex Harditex	1/4	No. 11 ga. 1-1/4 in. long galvanized roofing nail	4 edge 12 field	2 x 4 wood	16	20	120	90	-	120	90	-	120	90	-
						40	120	90		120	90		120	90	
						60				110					
						100	100	80		80	80		100	80	
						200	90	70		70	70		90	70	
Hardipanel Hardiflex Harditex	5/16	0.091 in. shank, 0.225 in. HD, 1.5 in. long ring shank nail	4 edge 8 field	2 x 4 wood ²	16	0-15	110	100	-	100	80	-	115	85	-
						20	110	95		95	75		110	80	
						40	95	85		85	70		95	75	
						60	90	80		80			85	70	
						100	80			80			70	70	
Hardipanel Hardiflex Harditex	5/16	4d common 1-1/2 in. long	8	2 x 4 wood	16	40	110	80	-	110	80	-	110	80	-
						100	90	70		70		90	70		
						150	80			80		80			
						200	70			70		70			
						20	90			90		90			
Hardipanel Hardiflex Harditex	5/16	6d common 2 in. long	6	2 x 4 wood	16	20	120	110	-	120	120	-	120	100	-
						40	120	100		120	120		120	90	
						60	110	95		120	100		120	80	
						100	100	90		90	90		95	70	
						200	90	80		80			80		
Hardipanel Hardiflex Harditex	5/16	6d common 2 in. long	6	2 x 4 wood	24	20	110	80	-	120	110	-	120	80	-
						40	100	80		105	90		105	80	
						60	90	70		95	90		95	70	
						100	80	70		70			80		
						200	70			70			70		
Hardipanel Hardiflex Harditex	5/16	6d common 2 in. long	4	2 x 4 wood	16	20	120	120	-	120	120	-	120	100	-
						40	120	120		120	120		120	100	
						60	120	120		120	110		120	90	
						100	120	110		80	80		120	80	
						200	120	100		70	70		105	70	
Hardipanel Hardiflex Harditex	5/16	6d common 2 in. long	4	2 x 4 wood	24	20	120	105	-	120	120	-	120	105	-
						40	120	100		120	110		120	95	
						60	110	90		120	110		120	90	
						100	100	85		80	80		100	80	
						200	90	80		70	70		80	70	

Table 2a — MAXIMUM WIND SPEED

Product Type	Product Thick. (in.)	Fastener Type	Fastener Spacing (in.)	Frame Type ¹	Stud Spacing (in.)	Height of Bldg (ft)	Maximum Basic Wind Speed (Mph) for Exposure Category								
							Uniform Building Code			Standard Building Code			BOCA National Building Code		
							B	C	D	< 60 ft	C	D	B	C	D
Hardipanel Hardiflex Harditex	5/16	6d common 2 in. long	6 edge 12 field	2 x 4 wood	16	40	120	90	-	120	90	-	120	90	-
						60			110						
						100	100	80		80		100	80		
						200	90	70		70		90	70		
Hardipanel Shiplap Panel	5/16	0.092" shank x 2" x 0.225" HD ringshank nail	3 edge 8 field	2 x 4 SG = 0.40	16	0-15	140	110	95	125			150	110	90
						20	130	105	95	120			150	105	85
						40	120	95	90	110			130	95	80
						60	115	90	85	100			120	90	75
						100	105	85	80	100	80	-	95	80	-
Hardipanel Shiplap Panel	5/16	0.092" shank x 2" x 0.225" HD ringshank nail	4 edge 8 field	2 x 4 SG = 0.40	16	0-15	130	100	90	120			150	105	85
						20	130	100	90	115			140	100	80
						40	115	95	85	100			125	90	75
						60	110	90	80	95			115	85	75
						100	100	80	75	95	75	-	90	75	-
Hardipanel Shiplap Panel	5/16	0.092" shank x 2" x 0.225" HD ringshank nail	5 edge 8 field	2 x 4 SG = 0.40	16	0-15	130	95	85	115			140	90	80
						20	120	95	80	110			140	90	80
						40	110	85	80	95			120	85	75
						60	100	80	75	90			110	80	-
						100	90	80	70	90	-	-	90	75	-
Hardipanel Shiplap Panel	5/16	0.092" shank x 2" x 0.225" HD ringshank nail	6 edge 8 field	2 x 4 SG = 0.40	16	0-15	120	90	80	105			140	95	75
						20	115	90	80	100			130	90	70
						40	110	85	75	90			110	80	70
						60	100	80	75	85			100	75	-
						100	95	75	-	85	-	-	80	-	-
Hardipanel Shiplap Panel	5/16	0.092" shank x 2" x 0.225" HD ringshank nail	7 edge 8 field	2 x 4 SG = 0.40	16	0-15	110	85	75	100			130	90	70
						20	110	80	70	95			120	85	70
						40	100	80	70	85			100	80	-
						60	90	75	-	80			90	70	-
						100	85	70	-	80	-	-	75	-	-
Hardipanel Shiplap Panel	5/16	0.092" shank x 2" x 0.225" HD ringshank nail	8 edge 8 field	2 x 4 SG = 0.40	16	0-15	105	80	70	90			120	80	70
						20	100	80	70	90			110	80	-
						40	90	70	-	80			95	70	-
						60	85	70	-	75			90	-	-
						100	80	-	-	75			75	-	-
Hardiflex Harditex	7/16	No. 11 ga 1-3/4 in. long galvanized roofing nail	6	2 x 4 wood	16	20	120	120	-	120	120	-	120	120	-
						40	120	110		120	110		120	110	
						60	120	110		120	100		120	100	
						100	110	110		120	90		110	90	
Hardishingle Panel Straight Installation	1/4	0.083" shank x0.187" HD ringshank nail into OSB only	13.75			0-15	100	70	-	80			110	70	-
						20	90	70	-	80			105	70	-
						40	85	70	-	70			90	70	-
						60	80	-	-	70			80	-	-
Hardishingle Panel Staggered Installation	1/4	0.083" shank x0.187" HD ringshank nail into OSB only	13.75			0-15	90	70	-	80			90	70	-
						20	90	70	-	80			90	-	-
						40	80	-	-	70			80	-	-
						60	70	-	-	-			70	-	-
Hardishingle Panel	1/4	0.083" shank x 0.187" HD ringshank nail at each stud	-	2 x 4 SG = 0.40	16	0-15	150	120	110	150			150	120	100
						20	150	120	100	150			150	120	100
						40	140	110	100	130			150	110	90
						60	130	105	95	120			140	100	90
Hardishingle Panel	1/4	0.083" shank x 0.187" HD ringshank nail at each stud	-	2 x 4 SG = 0.40	24	0-15	115	90	80	100			130	90	70
						20	110	85	70	100			120	85	70
						40	105	80	70	90			110	80	-
						60	90	75	-	85			100	75	-
Hardishingle Panel	1/4	0.083" shank x 0.187" HD ringshank nail at each stud	-	2 x 4 SG = 0.40	24	0-15	115	90	80	100			130	90	70
						20	110	85	70	100			120	85	70
						40	105	80	70	90			110	80	-
						60	90	75	-	85			100	75	-
Hardishingle Panel	1/4	0.083" shank x 0.187" HD ringshank nail at each stud	-	2 x 4 SG = 0.40	24	0-15	115	90	80	100			130	90	70
						20	110	85	70	100			120	85	70
						40	105	80	70	90			110	80	-
						60	90	75	-	85			100	75	-
Hardishingle Panel	1/4	0.083" shank x 0.187" HD ringshank nail at each stud	-	2 x 4 SG = 0.40	24	0-15	115	90	80	100			130	90	70
						20	110	85	70	100			120	85	70
						40	105	80	70	90			110	80	-
						60	90	75	-	85			100	75	-

Table 2a — MAXIMUM WIND SPEED

Product Type	Product Thick. (in.)	Fastener Type	Fastener Spacing (in.)	Frame Type ¹	Stud Spacing (in.)	Height of Bldg (ft)	Maximum Basic Wind Speed (Mph) for Exposure Category								
							Uniform Building Code			Standard Building Code			BOCA National Building Code		
							B	C	D	< 60 ft	C	D	B	C	D
Hardiflex Hardisoffit (unvented)	3/16	Min. No. 8 x 1 in. long x 0.323 in. HD ribbed buglehead screws	6	Min. No. 20 ga. x 3-5/8 in. x 1-3/8 in. metal C-stud	16	20 40 60 100	80 80 70 70	70	-	80 80 70	70	-	80 80 70	70	-
Hardipanel Hardiflex Harditex	1/4	Min. No. 8 x 1 in. long x 0.323 in. HD ribbed buglehead screws	6	Min. No. 20 ga. x 3-5/8 in. x 1-3/8 in. metal C-stud	16 24	20 40 60 100 150 200 20 40 100	120 110 90 80 90 80 70 70	90	N/A	120 110 100 90 70 80	90	N/A	120 110 100 90 80 70 80	90	N/A
Hardipanel	5/16	ET & F 0.100 x 1.5" x 25" HD ES 4144	4 edge 8 field	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	0-15 20 40 60 100	150 140 130 120 110	115	100	130 130 120 110			150 150 140 130 105	120 110 100 90 85	100 90 90 80 70
Hardipanel	5/16	ET & F 0.100 x 1.5" x 25" HD ES 4144	4 edge 8 field	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15 20 40 60 100	120 110 100 95 85	90	80	105 100 90 85			135 130 110 100 80	90 90 80 75 -	75 70 70 70 -
Hardiflex Harditex	7/16	Min. No. 8 x 1 in. long x 0.311 in. HD ribbed buglehead screws	6	Min. No. 20 ga. x 3-5/8 in. x 1-3/8 in. metal C-stud	16	20 40 60 100 200	120 120 120 110 110	120	-	120 120 120	120	-	120 120 120 120 100	120 120 110 90 80	-

Notes to Table 2a:

1. Values are for species of wood having a specific gravity of 0.42 or greater, unless otherwise noted.
2. Values are for species of wood having a specific gravity of 0.36 or greater.

Table 2b — MAXIMUM WIND SPEED

Product Type	Product (in.)		Fastener Type	Fastener Spacing (in.)	Frame Type ¹	Stud Spacing (in.)	Height of Bldg (ft)	Maximum Basic Wind Speed (Mph) for Exposure Category								
	Thick.	Width						Uniform Building Code			Standard Building Code			BOCA National Building Code		
								B	C	D	< 60 ft	C	D	B	C	D
Hardiplank	5/16	4.00	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	150	150	150	150			150	150	150
							20	150	150	150	150			150	150	150
							40	150	150	150	150			150	150	150
							60	150	150	150	150			150	150	140
						100	150	150	150		140	120	150	140	120	
Hardiplank	5/16	6.00	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	150	150	140	150			150	150	130
							20	150	150	140	150			150	150	130
							40	150	140	130	150			150	140	120
							60	150	130	120	150			150	130	110
						100	150	130	120		110	100	140	110	100	
Hardiplank	5/16	6.25	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	150	150	140	150			150	150	130
							20	150	150	130	150			150	150	120
							40	150	140	130	150			150	140	120
							60	140	130	120	150			150	130	110
						100	130	130	120		110	100	130	110	100	
Hardiplank	5/16	7.50	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	150	140	120	150			150	140	110
							20	150	130	120	150			150	130	110
							40	150	120	110	130			150	120	105
							60	140	120	110	130			150	110	110
						100	130	110	100		100	80	120	100	80	
Hardiplank	5/16	8.00	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	150	130	110	150			150	130	110
							20	150	130	110	150			150	130	110
							40	150	120	110	130			150	120	100
							60	130	110	105	12			150	110	90
						100	130	110	100		95	90	120	95	85	
Hardiplank	5/16	8.25	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	150	130	110	150			150	130	110
							20	150	130	110	140			150	130	100
							40	140	110	100	130			150	115	100
							60	130	110	100	120			140	110	90
						100	120	105	100		90	80	120	90	80	
Hardiplank	5/16	9.50	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	150	120	105	140			150	120	100
							20	150	120	100	130			150	120	100
							40	140	110	100	120			140	110	90
							60	120	105	90	110			130	100	90
						100	120	100	90		80	75	110	80	75	
Hardiplank	5/16	12.00	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	140	110	90	120			150	110	90
							20	140	105	90	120			150	110	90
							40	120	100	90	110			130	100	80
							60	110	95	85	100			120	90	80
						100	105	90	80		75	70	100	75	70	
Hardiplank	5/16	4.00	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	150	140	130	150			150	150	120
							20	150	140	125	150			150	140	120
							40	150	130	120	150			150	135	110
							60	150	125	115	140			150	125	105
						100	140	120	100		100	90	130	100	90	
Hardiplank	5/16	6.00	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	150	120	100	140			150	120	100
							20	150	115	100	135			150	120	100
							40	130	110	95	120			140	105	90
							60	125	100	90	110			130	100	85
						100	115	100	90		80	70	110	80	75	
Hardiplank	5/16	6.25	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	150	120	100	135			150	120	100
							20	150	110	100	130			150	110	95
							40	130	105	95	120			130	105	90
							60	120	100	90	110			120	100	80
						100	110	95	90		80	70	90	90	70	
Hardiplank	5/16	7.50	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	130	100	90	120			150	100	85
							20	125	100	85	110			140	100	80
							40	115	90	80	100			120	90	75
							60	110	85	80	95			110	80	75
						100	100	80	75		75	-	90	70	-	

Table 2b — MAXIMUM WIND SPEED

Product Type	Product (in.)		Fastener Type	Fastener Spacing (in.)	Frame Type ¹	Stud Spacing (in.)	Height of Bldg (ft)	Maximum Basic Wind Speed (Mph) for Exposure Category								
	Thick.	Width						Uniform Building Code			Standard Building Code			BOCA National Building Code		
								B	C	D	< 60 ft	C	D	B	C	D
Hardiplank	5/16	8.00	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	130	100	85	115			150	100	80
							20	120	95	80	110			140	100	80
							40	110	90	80	100			120	90	75
							60	105	85	75	95			110	80	70
							100	95	80	70		70	-	90	70	-
Hardiplank	5/16	8.25	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	125	95	85	110			140	100	80
							20	120	90	80	105			140	90	80
							40	110	85	80	95			120	85	70
							60	100	80	75	90			110	80	70
							100	90	80	70		70	-	90	70	-
Hardiplank	5/16	9.50	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	120	90	80	100			130	90	70
							20	110	90	75	100			130	90	70
							40	100	80	70	90			110	80	70
							60	90	80	70	85			110	80	-
							100	85	70	-		-	-	80	-	-
Hardiplank	5/16	12.00	ET & F pin 0.100 × 1.5" × 0.25" HD	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	100	80	-	90			120	80	-
							20	100	80	-	90			110	80	-
							40	90	70	-	80			90	70	-
							60	85	70	-	75			90	-	-
							100	80	-	-		-	-	70	-	-
Hardiplank	5/16	4.00	ET & F Panelfast 0.100 × 1.5" × 0.313" HD	Through top edge of plank	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	150	150	150	150			150	150	150
							20	150	150	150	150			150	150	150
							40	150	150	150	150			150	150	150
							60	150	150	150	150			150	150	150
							100	150	150	150		150	150	150	150	140
Hardiplank	5/16	6.00	ET & F Panelfast 0.100 × 1.5" × 0.313" HD	Through top edge of plank	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	150	110	100	130			140	110	90
							20	150	110	100	140			140	105	85
							40	130	100	90	120			130	95	80
							60	120	100	90	110			120	90	80
							100	110	90	80		75	-	95	75	-
Hardiplank	5/16	6.25	ET & F Panelfast 0.100 × 1.5" × 0.313" HD	Through top edge of plank	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	140	110	100	130			150	100	85
							20	140	110	90	120			140	100	80
							40	120	100	90	115			120	90	75
							60	120	95	85	105			110	85	70
							100	110	90	80		70	-	90	70	-
Hardiplank	5/16	7.50	ET & F Panelfast 0.100 × 1.5" × 0.313" HD	Through top edge of plank	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	120	90	80	110			130	90	70
							20	120	90	80	100			120	85	70
							40	110	80	75	95			105	75	-
							60	100	80	70	90			95	70	-
							100	90	75	70		-	-	75	-	-
Hardiplank	5/16	8.00	ET & F Panelfast 0.100 × 1.5" × 0.313" HD	Through top edge of plank	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	110	90	80	100			120	80	70
							20	110	85	70	100			110	80	-
							40	100	80	70	90			100	70	-
							60	90	70	70	80			90	70	-
							100	80	70	-		-	-	70	-	-
Hardiplank	5/16	8.25	ET & F Panelfast 0.100 × 1.5" × 0.313" HD	Through top edge of plank	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	110	90	70	100			120	80	-
							20	110	80	70	95			110	80	-
							40	100	80	70	85			100	70	-
							60	90	70	-	70			90	-	-
							100	80	70	-		-	-	70	-	-
Hardiplank	5/16	4.00	ET & F Panelfast 0.100 × 1.5" × 0.313" HD	Through top edge of plank	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	150	150	150	150			150	150	150
							20	150	150	150	150			150	150	150
							40	150	150	150	150			150	150	140
							60	150	150	150	150			150	150	130
							100	150	50	150		130	110	150	130	110
Hardiplank	5/16	6.00	ET & F Panelfast 0.100 × 1.5" × 0.313" HD	Through top edge of plank	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	130	100	90	110			140	95	80
							20	120	100	85	110			130	90	70
							40	110	90	85	100			110	80	70
							60	110	85	80	90			105	80	-
							100	100	80	70		-	-	80	-	-

Table 2b — MAXIMUM WIND SPEED

Product Type	Product (in.)		Fastener Type	Fastener Spacing (in.)	Frame Type ¹	Stud Spacing (in.)	Height of Bldg (ft)	Maximum Basic Wind Speed (Mph) for Exposure Category								
	Thick.	Width						Uniform Building Code			Standard Building Code			BOCA National Building Code		
								B	C	D	< 60 ft	C	D	B	C	D
Hardiplank	5/16	6.25	ET & F Panelfast 0.100 x 1.5" x 0.313" HD	Through top edge of plank	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15	120	95	80	110			130	90	70
							20	120	90	80	100			120	85	70
							40	110	85	70	90			110	80	-
							60	100	80	70	80			90	75	-
							100	90	70	70	80	-	-	70	-	-
Hardiplank	5/16	7.50	ET & F Panelfast 0.100 x 1.5" x 0.313" HD	Through top edge of plank	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15	110	90	70	100			120	80	70
							20	110	85	70	100			110	80	-
							40	100	80	70	90			100	70	-
							60	90	75	70	80			90	70	-
							100	85	70	-	80	-	-	70	-	-
Hardiplank	5/16	8.00	ET & F Panelfast 0.100 x 1.5" x 0.313" HD	Through top edge of plank	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15	100	80	70	90			110	70	-
							20	100	75	70	90			100	70	-
							40	90	70	-	80			85	-	-
							60	80	-	-	75			80	-	-
							100	75	-	-	-	-	-	-	-	-
Hardiplank	5/16	8.25	ET & F Panelfast 0.100 x 1.5" x 0.313" HD	Through top edge of plank	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	24	0-15	90	70	-	80			100	-	-
							20	90	70	-	80			90	-	-
							40	80	-	-	70			80	-	-
							60	75	-	-	70			70	-	-
							100	70	-	-	-	-	-	-	-	-
Hardiplank	5/16	4.00	6d common 2" long	Through Overlap	2 x 4	16	0-15	150	150	150	150			150	150	150
							20	150	150	150	150			150	150	150
							40	150	150	150	150			150	150	150
							60	150	150	150	150			150	150	130
							100	150	150	140	150	130	120	150	130	120
Hardiplank	5/16	6.00	6d common 2" long	Through Overlap	2 x 4	16	0-15	150	150	135	150			150	150	130
							20	150	150	130	150			150	150	130
							40	150	150	120	150			150	140	120
							60	150	150	120	150			150	130	115
							100	150	150	120	150	110	100	140	110	100
Hardiplank	5/16	6.25	6d common 2" long	Through Overlap	2 x 4	16	0-15	150	150	120	150			150	150	130
							20	150	150	120	150			150	150	120
							40	150	150	120	150			150	40	120
							60	150	130	120	150			150	130	115
							100	150	130	110	150	110	100	150	110	100
Hardiplank	5/16	7.50	6d common 2" long	Through Overlap	2 x 4	16	0-15	150 ¹	150	120	150			150	140	120
							20	50	150	120	150			150	140	120
							40	150	130	110	140			150	120	120
							60	150	120	110	130			150	120	115
							100	130	110	110	130	110	90	140	100	90
Hardiplank	5/16	8.00	6d common 2" long	Through Overlap	2 x 4	16	0-15	150	130	120	150			150	140	110
							20	150	130	115	150			150	140	110
							40	150	120	110	130			150	120	100
							60	140	120	105	130			150	115	100
							100	130	110	100	130	95	85	120	95	85
Hardiplank	5/16	8.25	6d common 2" long	Through Overlap	2 x 4	16	0-15	150	130	115	150			150	140	110
							20	150	130	110	150			150	130	100
							40	150	120	110	130			150	120	100
							60	140	115	105	120			150	110	100
							100	130	110	100	120	95	80	130	95	80
Hardiplank	5/16	9.50	6d common 2" long	Through Overlap	2 x 4	16	0-15	150	120	110	140			150	130	105
							20	150	120	110	140			150	120	100
							40	140	110	100	120			140	120	95
							60	130	105	100	120			120	120	90
							100	120	100	95	120	90	80	115	90	80
Hardiplank	5/16	12.00	6d common 2" long	Through Overlap	2 x 4	16	0-15	140	110	95	130			150	110	95
							20	140	105	95	120			150	110	90
							40	120	100	90	110			140	100	85
							60	115	95	85	105			120	95	80
							100	110	90	80	105	80	70	100	80	70

Table 2b — MAXIMUM WIND SPEED

Product Type	Product (in.)		Fastener Type	Fastener Spacing (in.)	Frame Type ¹	Stud Spacing (in.)	Height of Bldg (ft)	Maximum Basic Wind Speed (Mph) for Exposure Category								
	Thick.	Width						Uniform Building Code			Standard Building Code			BOCA National Building Code		
								B	C	D	< 60 ft	C	D	B	C	D
Hardiplank	5/16	4.00	6d common 2" long	Through Overlap	2 x 4	24	0-15	150	130	115	150			150	130	110
							20	150	130	110	140			150	130	110
							40	150	120	110	130			150	120	100
							60	140	120	100	120			150	115	95
							100	130	110	100		95	80	120	95	80
Hardiplank	5/16	6.00	6d common 2" long	Through Overlap	2 x 4	24	0-15	140	110	95	130			120	110	90
							20	140	100	95	120			120	110	90
							40	130	100	95	110			120	100	80
							60	115	95	85	105			120	90	80
							100	105	90	80		80	70	100	80	70
Hardiplank	5/16	6.25	6d common 2" long	Through Overlap	2 x 4	24	0-15	120	105	95	120			120	110	90
							20	120	100	90	120			120	100	85
							40	120	95	85	110			120	95	80
							60	110	90	80	100			120	90	80
							100	105	85	80		80	70	100	80	70
Hardiplank	5/16	7.50	6d common 2" long	Through Overlap	2 x 4	24	0-15	120	95	85	110			120	100	80
							20	120	95	85	110			120	95	80
							40	110	85	80	100			120	90	75
							60	100	85	75	95			120	85	70
							100	95	80	70		70	70	90	70	-
Hardiplank	5/16	8.00	6d common 2" long	Through Overlap	2 x 4	24	0-15	120	95	80	110			120	100	80
							20	120	95	80	105			120	90	70
							40	105	85	70	100			110	80	70
							60	100	85	70	90			105	80	70
							100	90	75	70		70	-	85	70	-
Hardiplank	5/16	8.25	6d common 2" long	Through Overlap	2 x 4	24	0-15	115	95	80	110			120	95	80
							20	115	95	80	100			120	90	75
							40	105	85	70	95			110	80	70
							60	100	85	70	90			105	75	70
							100	90	75	70				85	-	-
Hardiplank	5/16	9.50	6d common 2" long	Through Overlap	2 x 4	24	0-15	110	85	75	100			120	90	70
							20	110	85	70	95			120	85	70
							40	95	75	70	85			100	80	-
							60	90	75	-	85			100	70	-
							100	85	70	-		-	-	80	-	-
Hardiplank	5/16	12.00	6d common 2" long	Through Overlap	2 x 4	24	0-15	70	75	-	90			110	80	-
							20	95	70	-	85			110	75	-
							40	90	70	-	80			95	70	-
							60	80	-	-	75			85	-	-
							100	70	-	-		-	-	70	-	-
Hardiplank	5/16	4.00	No. 8-18 x 1-5/8" long x 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	0-15	150	150	150	150			150	150	150
							20	150	150	150	150			150	150	140
							40	150	150	140	150			150	150	140
							60	150	150	140	150			150	150	130
							100	150	150	130		130	115	150	130	115
Hardiplank	5/16	6.00	No. 8 x 1-5/8" long x 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	0-15	150	150	140	150			150	150	120
							20	150	140	140	150			150	140	120
							40	150	130	130	150			150	130	115
							60	150	130	130	140			150	120	110
							100	140	120	120		105	95	135	105	95
Hardiplank	5/16	6.25	No. 8 x 1-5/8" long x 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	0-15	150	140	120	150			150	150	120
							20	150	140	120	150			150	140	120
							40	150	130	110	140			150	130	110
							60	150	120	110	140			150	120	105
							100	140	120	110		105	90	130	105	90
Hardiplank	5/16	7.50	No. 8 x 1-5/8" long x 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. x 3.62" x 1.375" Metal C-stud	16	0-15	150	130	110	150			150	130	110
							20	150	120	110	140			150	130	105
							40	140	110	105	130			150	115	100
							60	130	110	100	120			150	110	90
							100	120	100	95		90	80	115	90	80

Table 2b — MAXIMUM WIND SPEED

Product Type	Product (in.)		Fastener Type	Fastener Spacing (in.)	Frame Type ¹	Stud Spacing (in.)	Height of Bldg (ft)	Maximum Basic Wind Speed (Mph) for Exposure Category								
	Thick.	Width						Uniform Building Code			Standard Building Code			BOCA National Building Code		
								B	C	D	< 60 ft	C	D	B	C	D
Hardiplank	5/16	8.00	No. 8 × 1-5/8" long × 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	150	130	110	150			150	130	110
							20	150	120	110	140			150	130	105
							40	150	110	105	130			150	115	100
							60	150	110	100	120	90	80	140	110	90
							100	130	100	95			115	90	80	
Hardiplank	5/16	8.25	No. 8 × 1-5/8" long × 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	150	120	110	140			150	130	110
							20	150	120	110	140			150	120	105
							40	140	110	105	120			150	115	100
							60	120	110	100	120	90	80	140	105	90
							100	120	100	95			115	90	80	
Hardiplank	5/16	9.50	No. 8 × 1-5/8" long × 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	150	115	100	130			150	120	100
							20	150	110	100	130			150	115	95
							40	130	110	95	120			140	105	90
							60	120	110	90	110	85	75	130	100	85
							100	115	95	85			110	85	75	
Hardiplank	5/16	12.00	No. 8 × 1-5/8" long × 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	16	0-15	130	100	90	120			150	110	90
							20	130	100	90	120			150	105	80
							40	120	90	80	100			120	95	80
							60	110	90	80	100	75	-	120	90	75
							100	100	85	80			95	75	-	
Hardiplank	5/16	4.00	No. 8 × 1-5/8" long × 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	150	150	130	150			150	150	120
							20	150	140	130	150			150	140	120
							40	150	130	120	150			150	130	110
							60	150	130	110	140	105	90	150	120	110
							100	140	110	110			135	105	90	
Hardiplank	5/16	6.00	No. 8 × 1-5/8" long × 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	150	130	105	140			150	120	100
							20	150	130	100	130			150	120	100
							40	150	110	100	120			140	110	95
							60	140	105	90	115	85	75	130	100	90
							100	130	100	90			110	85	75	
Hardiplank	5/16	6.25	No. 8 × 1-5/8" long × 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	150	120	100	135			150	150	100
							20	150	110	100	130			150	140	95
							40	130	105	90	120			140	130	90
							60	120	100	90	110	85	70	130	120	85
							100	110	95	90			110	85	75	
Hardiplank	5/16	7.50	No. 8 × 1-5/8" long × 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	140	110	90	120			150	110	90
							20	130	100	90	120			150	105	90
							40	120	95	85	110			130	95	80
							60	110	90	80	100	80	70	120	90	80
							100	100	90	80			115	80	70	
Hardiplank	5/16	8.00	No. 8 × 1-5/8" long × 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	130	105	90	120			150	110	90
							20	130	100	90	115			150	105	85
							40	120	95	80	105			130	95	80
							60	110	90	80	100	75	-	120	90	75
							100	100	85	80			95	75	-	
Hardiplank	5/16	8.25	No. 8 × 1-5/8" long × 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	130	100	90	120			150	105	90
							20	130	100	90	115			150	105	85
							40	120	90	80	105			120	90	80
							60	110	90	80	100	75	-	115	85	75
							100	100	85	75			95	75	-	
Hardiplank	5/16	9.50	No. 8 × 1-5/8" long × 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	120	95	80	110			140	100	80
							20	120	90	80	105			140	95	80
							40	110	85	75	95			120	85	75
							60	100	80	70	90	70	-	110	80	70
							100	90	80	70			90	70	-	
Hardiplank	5/16	12.00	No. 8 × 1-5/8" long × 0.323" HD ribbed bugle head screw	Through Overlap	Min. No. 20 ga. × 3.62" × 1.375" Metal C-stud	24	0-15	115	80	70	100			130	90	70
							20	110	80	70	95			120	85	70
							40	95	75	70	85			100	75	-
							60	90	70	-	80			95	70	-
							100	80	70	-			80	-	-	

Table 2b — MAXIMUM WIND SPEED

Product Type	Product (in.)		Fastener Type	Fastener Spacing (in.)	Frame Type ¹	Stud Spacing (in.)	Height of Bldg (ft)	Maximum Basic Wind Speed (Mph) for Exposure Category								
	Thick.	Width						Uniform Building Code			Standard Building Code			BOCA National Building Code		
								B	C	D	< 60 ft	C	D	B	C	D
Hardiplank	5/16	4.00	No. 11 ga. 1-1/4" long Galv. roofing nail	Through top edge of plank	2 x 4 wood	16	0-15	150	150	150	150			150	150	150
							20	150	150	150	150			150	150	150
							40	150	150	150	150			150	150	150
							60	150	150	150	150			150	150	150
							100	150	150	150	150	140	120	150	140	120
Hardiplank	5/16	6.00	No. 11 ga. 1-1/4" long galv. roofing nail	Through top edge of plank	2 x 4 wood	16	0-15	150	150	130	150			150	150	130
							20	150	150	130	150			150	150	120
							40	150	140	120	150			150	130	115
							60	150	130	120	140			150	130	110
							100	150	120	110	140	110	95	140	110	95
Hardiplank	5/16	6.25	No. 11 ga. 1-1/4" long galv. roofing nail	Through top edge of plank	2 x 4 wood	16	0-15	150	150	130	150			150	150	120
							20	150	140	120	150			150	140	120
							40	150	130	120	150			150	130	110
							60	150	130	110	140			150	120	110
							100	140	120	110	140	100	95	135	100	95
Hardiplank	5/16	7.50	No. 11 ga. 1-1/4" long galv. roofing nail	Through top edge of plank	2 x 4 wood	16	0-15	150	130	115	150			150	130	110
							20	150	130	110	140			150	130	110
							40	150	120	110	135			150	120	100
							60	140	115	105	125			150	110	95
							100	130	110	100	125	95	85	120	95	85
Hardiplank	5/16	8.00	No. 11 ga. 1-1/4" long galv. roofing nail	Through top edge of plank	2 x 4 wood	16	0-15	150	130	110	150			150	130	105
							20	150	120	110	140			150	120	100
							40	140	115	100	130			150	115	95
							60	130	110	100	120			140	110	95
							100	120	110	95	120	90	80	115	90	80
Hardiplank	5/16	8.25	No. 11 ga. 1-1/4" long galv. roofing nail	Through top edge of plank	2 x 4 wood	16	0-15	150	120	110	140			150	130	105
							20	150	120	105	140			150	120	105
							40	140	110	100	125			150	110	95
							60	130	110	100	120			140	105	90
							100	120	100	95	120	90	80	115	90	80
Hardiplank	5/16	9.50	No. 11 ga. 1-1/4" long galv. roofing nail	Through top edge of plank	2 x 4 wood	16	0-15	150	110	100	130			150	120	100
							20	140	110	100	130			150	115	95
							40	130	100	90	115			140	100	90
							60	120	100	90	110			130	100	85
							100	110	95	80	110	80	70	105	80	70
Hardiplank	5/16	12.00	No. 11 ga. 1-1/4" long galv. roofing nail	Through top edge of plank	2 x 4 wood	16	0-15	130	100	90	115			150	105	85
							20	120	100	80	110			140	100	80
							40	110	90	80	100			120	95	75
							60	110	80	80	95			110	85	75
							100	100	80	75	95	75	-	90	75	-
Hardiplank	5/16	4.00	No. 11 ga. 1-1/4" long galv. roofing nail	Through top edge of plank	2 x 4 wood	24	0-15	150	150	140	150			150	150	130
							20	150	150	140	150			150	150	130
							40	150	150	130	150			150	140	120
							60	150	140	130	150			150	140	120
							100	150	130	120	150	115	105	150	115	105
Hardiplank	5/16	6.00	No. 11 ga. 1-1/4" long galv. roofing nail	Through top edge of plank	2 x 4 wood	24	0-15	150	120	110	140			150	130	105
							20	150	120	105	140			150	120	105
							40	140	110	100	125			150	110	95
							60	130	110	100	115			140	105	90
							100	120	100	100	115	90	80	110	90	80
Hardiplank	5/16	6.25	No. 11 ga. 1-1/4" long galv. roofing nail	Through top edge of plank	2 x 4 wood	24	0-15	150	120	110	140			150	125	100
							20	150	120	100	130			150	120	100
							40	130	110	100	120			150	110	95
							60	120	110	95	110			130	105	90
							100	120	100	90	110	85	80	110	85	80
Hardiplank	5/16	7.50	No. 11 ga. 1-1/4" long galv. roofing nail	Through top edge of plank	2 x 4 wood	24	0-15	140	110	95	120			150	115	90
							20	140	105	90	120			150	110	90
							40	120	100	90	110			130	100	80
							60	120	95	85	100			120	95	80
							100	110	90	70	100	80	70	100	80	70

Table 2b — MAXIMUM WIND SPEED

Product Type	Product (in.)		Fastener Type	Fastener Spacing (in.)	Frame Type ¹	Stud Spacing (in.)	Height of Bldg (ft)	Maximum Basic Wind Speed (Mph) for Exposure Category								
	Thick.	Width						Uniform Building Code			Standard Building Code			BOCA National Building Code		
								B	C	D	< 60 ft	C	D	B	C	D
Hardiplank	5/16	8.00	No. 11 ga. 1-1/4" long galv. roofing nail	Through top edge of plank	2 x 4 wood	24	0-15	130	100	90	120			150	110	90
							20	130	100	90	115			150	105	80
							40	120	95	80	105			120	95	80
							60	120	95	80	100			110	90	75
							100	110	90	70		90	-	95	90	-
Hardiplank	5/16	8.25	No. 11 ga. 1-1/4" long galv. roofing nail	Through top edge of plank	2 x 4 wood	24	0-15	130	100	90	120			150	110	85
							20	130	100	90	110			140	105	85
							40	120	95	80	100			120	90	80
							60	110	95	80	95			110	90	75
							100	100	90	75		75	-	90	70	-
Hardiplank	5/16	9.50	No. 11 ga. 1-1/4" long galv. roofing nail	Through top edge of plank	2 x 4 wood	24	0-15	120	95	80	110			140	100	80
							20	120	90	80	105			130	90	75
							40	110	90	70	95			115	85	70
							60	100	85	70	90			105	80	70
							100	95	75	70		70	-	85	70	-
Hardiplank	5/16	12.00	No. 11 ga. 1-1/4" long galv. roofing nail	Through top edge of plank	2 x 4 wood	24	0-15	110	80	70	90			120	85	70
							20	110	80	70	90			120	80	70
							40	100	80	70	80			105	75	-
							60	80	80	-	80			90	70	-
							100	80	80	-		-	-	80	-	-
Hardiplank	5/16	4.00	No. 8 x 1-1/4 in. long x 0.375 in. HD ribbed waferhead screws	Through top edge of plank	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud	16	0-15	150	150	150	150			150	150	150
							20	150	150	150	150			150	150	140
							40	150	150	150	150			150	150	130
							60	150	150	150	160			150	150	130
							100	150	140	140	-			150	120	110
Hardiplank	5/16	6	No. 8 x 1-1/4 in. long x 0.375 in. HD ribbed waferhead screws	Through top edge of plank	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud	16	0-15	150	140	125	150			150	150	120
							20	150	140	120	150			150	140	120
							40	150	130	115	140			150	130	110
							60	150	120	110	140			150	120	105
							100	140	120	110	-			130	100	90
Hardiplank	5/16	6-1/4	No. 8 x 1-1/4 in. long x 0.375 in. HD ribbed waferhead screws	Through top edge of plank	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud	16	0-15	150	140	120	150			150	140	125
							20	150	140	120	150			150	140	115
							40	150	130	110	140			150	130	110
							60	150	120	110	130			150	120	105
							100	135	110	100	-			130	100	90
Hardiplank	5/16	7-1/2	No. 8 x 1-1/4 in. long x 0.375 in. HD ribbed waferhead screws	Through top edge of plank	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud	16	0-15	150	130	110	150			150	135	110
							20	150	120	105	140			150	130	100
							40	140	115	105	130			150	120	100
							60	140	100	105	130			140	110	95
							100	125	95	95	-			115	90	80
Hardiplank	5/16	8	No. 8 x 1-1/4 in. long x 0.375 in. HD ribbed waferhead screws	Through top edge of plank	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud	16	0-15	150	125	110	140			150	130	100
							20	150	120	105	140			150	120	100
							40	140	110	100	125			140	110	90
							60	130	110	100	120			130	105	90
							100	120	100	95	-			115	90	80
Hardiplank	5/16	8-1/4	No. 8 x 1-1/4 in. long x 0.375 in. HD ribbed waferhead screws	Through top edge of plank	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud	16	0-15	150	120	110	140			150	125	105
							20	150	120	105	130			150	120	100
							40	140	110	100	125			140	110	95
							60	130	105	95	115			130	100	90
							100	120	100	90	-			110	85	75
Hardiplank	5/16	9-1/2	No. 8 x 1-1/4 in. long x 0.375 in. HD ribbed waferhead screws	Through top edge of plank	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud	16	0-15	150	115	100	130			150	120	100
							20	140	110	100	130			150	110	90
							40	130	105	90	120			140	100	90
							60	120	100	90	110			120	95	85
							100	110	90	85	-			100	85	80

Table 2b — MAXIMUM WIND SPEED

Product Type	Product (in.)		Fastener Type	Fastener Spacing (in.)	Frame Type ¹	Stud Spacing (in.)	Height of Bldg (ft)	Maximum Basic Wind Speed (Mph) for Exposure Category								
	Thick.	Width						Uniform Building Code			Standard Building Code			BOCA National Building Code		
								B	C	D	< 60 ft	C	D	B	C	D
Hardiplank	5/16	4	No. 8 x 1-1/4 in. long x 0.375 in. HD ribbed waferhead screws	Through top edge of plank	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud	24	0-15	150	140	125	150			150	150	120
							20	150	140	120	150			150	140	120
							40	150	130	115	140			150	130	110
							60	150	120	110	140			150	120	105
							100	140	120	110	-	100	90	130	100	90
Hardiplank	5/16	6	No. 8 x 1-1/4 in. long x 0.375 in. HD ribbed waferhead screws	Through top edge of plank	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud	24	0-15	150	120	100	130			150	120	100
							20	150	110	100	130			150	115	95
							40	130	105	90	120			135	105	90
							60	120	100	90	110			130	100	85
							100	110	95	90	-	85	75	105	85	75
Hardiplank	5/16	6-1/4	No. 8 x 1-1/4 in. long x 0.375 in. HD ribbed waferhead screws	Through top edge of plank	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud	24	0-15	150	115	100	130			150	120	100
							20	140	110	100	130			150	115	90
							40	130	105	95	115			140	105	90
							60	120	100	90	110			130	100	85
							100	110	95	85	-	85	70	105	85	70
Hardiplank	5/16	7-1/2	No. 8 x 1-1/4 in. long x 0.375 in. HD ribbed waferhead screws	Through top edge of plank	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud	24	0-15	140	105	90	120			150	110	90
							20	130	100	90	115			150	100	85
							40	120	95	85	105			130	90	75
							60	110	90	80	100			120	75	75
							100	100	85	70	-	NA	NA	90	NA	NA
Hardiplank	5/16	8	No. 8 x 1-1/4 in. long x 0.375 in. HD ribbed waferhead screws	Through top edge of plank	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud	24	0-15	130	100	90	120			150	105	85
							20	130	100	85	115			140	100	85
							40	120	90	80	100			125	90	75
							60	100	85	80	95			115	85	75
							100	100	80	75	-	75	NA	90	75	NA
Hardiplank	5/16	8-1/4	No. 8 x 1-1/4 in. long x 0.375 in. HD ribbed waferhead screws	Through top edge of plank	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud	24	0-15	130	100	90	110			150	105	85
							20	125	100	85	110			140	100	85
							40	115	90	80	100			125	90	75
							60	105	85	80	95			110	85	75
							100	100	80	75	-	75	NA	90	75	NA
Hardiplank	5/16	9-1/2	No. 8 x 1-1/4 in. long x 0.375 in. HD ribbed waferhead screws	Through top edge of plank	Min. No. 20 ga. X 3.62" x 1.375" Metal C-stud	24	0-15	120	90	80	110			140	100	80
							20	120	90	80	105			130	90	75
							40	105	85	75	95			115	80	70
							60	100	80	75	90			105	75	70
							100	90	75	NA	-	NA	NA	85	NA	NA
Hardiplank	5/16	4.00	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	16	0-15	150	115	100	130			150	120	95
							20	140	110	95	125			150	110	95
							40	130	105	90	115			140	100	90
							60	120	100	90	110			130	95	85
							100	110	90	85	-	80	70	105	80	70
Hardiplank	5/16	6.00	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	16	0-15	120	90	85	110			140	95	80
							20	120	90	80	100			130	90	70
							40	105	80	75	90			110	85	70
							60	100	80	70	90			105	80	70
							100	90	75	70	-	-	-	90	-	-
Hardiplank	5/16	6.25	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	16	0-15	120	90	80	100			140	95	70
							20	105	90	80	100			130	90	70
							40	105	85	70	90			110	80	70
							60	95	80	70	85			105	75	-
							100	90	75	-	-	-	-	90	-	-
Hardiplank	5/16	7.50	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	16	0-15	110	80	70	90			120	85	70
							20	100	80	70	90			120	80	70
							40	90	75	-	80			100	75	-
							60	85	70	-	80			95	70	-
							100	80	70	-	-	-	-	75	-	-
Hardiplank	5/16	8.00	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	16	0-15	100	80	70	90			120	80	70
							20	100	80	70	90			115	80	-
							40	90	70	-	80			100	70	-
							60	80	70	-	75			90	70	-
							100	75	-	-	-	-	-	70	-	-

Table 2b — MAXIMUM WIND SPEED

Product Type	Product (in.)		Fastener Type	Fastener Spacing (in.)	Frame Type ¹	Stud Spacing (in.)	Height of Bldg (ft)	Maximum Basic Wind Speed (Mph) for Exposure Category								
	Thick.	Width						Uniform Building Code			Standard Building Code			BOCA National Building Code		
								B	C	D	< 60 ft	C	D	B	C	D
Hardiplank	5/16	8.25	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	16	0-15	100	80	70	90			120	80	-
							20	100	80	70	90			110	80	-
							40	90	70	-	80			100	70	-
							60	80	70	-	75			90	70	-
							100	75	-	-	-	-	-	70	-	-
Hardiplank	5/16	9.50	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	16	0-15	100	70	-	80			110	75	-
							20	90	70	-	80			105	70	-
							40	80	-	-	75			90	-	-
							60	80	-	-	70			85	-	-
							100	70	-	-	-	-	-	-	-	-
Hardiplank	5/16	12.00	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	16	0-15	90	-	-	70			100	70	-
							20	80	-	-	70			90	-	-
							40	70	-	-	-			80	-	-
							60	70	-	-	-			70	-	-
							100	-	-	-	-	-	-	-	-	-
Hardiplank	5/16	4.00	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	24	0-15	120	90	80	110			140	95	80
							20	120	90	80	105			130	90	75
							40	105	85	75	90			110	85	70
							60	100	80	70	90			105	80	70
							100	90	75	-	-	-	-	90	-	-
Hardiplank	5/16	6.00	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	24	0-15	100	70	-	90			115	80	-
							20	90	70	-	85			115	75	-
							40	85	70	-	75			90	70	-
							60	80	-	-	70			85	-	-
							100	70	-	-	-	-	-	70	-	-
Hardiplank	5/16	6.25	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	24	0-15	100	70	-	85			110	75	-
							20	90	70	-	80			105	70	-
							40	85	-	-	75			90	-	-
							60	80	-	-	70			80	-	-
							100	70	-	-	-	-	-	70	-	-
Hardiplank	5/16	7.50	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	24	0-15	90	70	-	80			105	70	-
							20	85	70	-	75			100	70	-
							40	80	-	-	70			85	-	-
							60	70	-	-	-			80	-	-
							100	70	-	-	-	-	-	-	-	-
Hardiplank	5/16	8.00	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	24	0-15	80	-	-	70			100	-	-
							20	80	-	-	70			90	-	-
							40	75	-	-	-			80	-	-
							60	70	-	-	-			70	-	-
							100	-	-	-	-	-	-	-	-	-
Hardiplank	5/16	8.25	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	24	0-15	80	-	-	70			100	-	-
							20	80	-	-	70			90	-	-
							40	75	-	-	-			80	-	-
							60	70	-	-	-			70	-	-
							100	-	-	-	-	-	-	-	-	-
Hardiplank	5/16	9.50	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	24	0-15	80	-	-	70			90	-	-
							20	70	-	-	-			80	-	-
							40	-	-	-	-			70	-	-
							60	-	-	-	-			70	-	-
							100	-	-	-	-	-	-	-	-	-
Hardiplank	5/16	12.00	0.089" shank x 0.221" HD x 2" long galv. siding nail	Through overlap	2 x 4	24	0-15	70	-	-	-			80	-	-
							20	-	-	-	-			80	-	-
							40	-	-	-	-			-	-	-
							60	-	-	-	-			-	-	-
							100	-	-	-	-	-	-	-	-	-
Hardiplank	5/16	4.00	0.093" shank x 0.222" HD x 2" long galv. siding nail	Through top edge of plank	2 x 4	16	0-15	150	130	110	150			150	130	110
							20	150	120	110	140			150	130	105
							40	140	115	100	130			150	115	100
							60	140	110	100	120			140	110	95
							100	125	100	95	-	90	80	110	90	80

Table 2b — MAXIMUM WIND SPEED

Product Type	Product (in.)		Fastener Type	Fastener Spacing (in.)	Frame Type ¹	Stud Spacing (in.)	Height of Bldg (ft)	Maximum Basic Wind Speed (Mph) for Exposure Category								
	Thick.	Width						Uniform Building Code			Standard Building Code			BOCA National Building Code		
								B	C	D	< 60 ft	C	D	B	C	D
Hardiplank	5/16	8.25	0.093" shank × 0.222" HD × 2" long galv. siding nail	Through top edge of plank	2 × 4	24	0-15	85	-	-	70			100	70	-
							20	85	-	-	70			95	-	-
							40	70	-	-	-			85	-	-
							60	70	-	-	-			75	-	-
							100	-	-	-	-	-	-	-	-	-
Hardiplank	5/16	9.50	0.093" shank × 0.222" HD × 2" long galv. siding nail	Through top edge of plank	2 × 4	24	0-15	80	-	-	70			90	-	-
							20	80	-	-	70			90	-	-
							40	70	-	-	-			75	-	-
							60	-	-	-	-			70	-	-
							100	-	-	-	-	-	-	-	-	-
Hardiplank	5/16	12.00	0.093" shank × 0.222" HD × 2" long galv. siding nail	Through top edge of plank	2 × 4	24	0-15	70	-	-	-			70	-	-
							20	-	-	-	-			80	-	-
							40	-	-	-	-			-	-	-
							60	-	-	-	-			-	-	-
							100	-	-	-	-	-	-	-	-	-
Hardiplank	5/16	9.50	0.091" shank, 0.221" HD, 1.5" long corrosion resistant nail	Face nailed through the overlap @ 12" o.c.	7/16" thick APA rated OSB sheathing or equivalent solid sheathing	-	0-15	100	80	-	90			115	80	-
							20	95	75	-	85			110	75	-
							40	85	70	-	80	-	-	90	70	-
							60	80	-	-	75	-	-	85	-	-
							100	70	-	-	-	-	-	70	-	-

Notes to Table 2b:

1. Values are for species of wood having a specific gravity of 0.42 or greater, unless otherwise noted.

Table 3 — SHEAR VALUES ALLOWABLE LOADS IN POUNDS PER LINEAL FOOT FOR PANEL SHEAR WALLS^{1,2}

Product Type	Product Thickness (inch)	Fastener Type	Fastener Spacing (inch)	Frame Types	Stud Spacing (inch)	Shear Value (plf)
Hardiflex Hardisoffit	3/16	4d common 1-1/2 in. long	6	2 × 4 wood ⁵	16	145
Hardipanel Hardiflex Hardisoffit	1/4	4d common 1-1/2 in. long	8	2 × 4 wood ⁵	16 & 24	120
Hardibacker Titan	1/4	0.086 in. × 1-3/8 in. long gypsum wall board nail	6	2 × 4 wood ⁵	16 & 24	140
Hardipanel Hardiflex	1/4	6d common 2 in. long	6	2 × 4 wood ⁵	16	190
Hardipanel Hardiflex Harditex Hardibacker Titan	1/4	No. 11 ga. 1-1/4 in. long galvanized roofing nail	6	2 × 4 wood ⁵	16 & 24	180
Hardipanel Hardiflex Harditex Hardibacker Titan	1/4	No. 11 ga. 1-1/4 in. long galvanized roofing nail	4 edge 12 field	2 × 4 wood ⁵	16 & 24	265
Hardipanel Hardiflex Harditex Hardibacker Titan	1/4	No. 11 ga. 1-1/4 in. long galvanized roofing nail	3 edge 6 field	2 × 4 wood ⁵ w/48 in. mid-height block	16 & 24	295
Shiplap	5/16	0.092 in. shank, 0.225 in. HD, 2 in. long ring shank nail	3 edge 8 field	2 × 4 wood ⁴	16	268
Shiplap	5/16	0.092 in. shank, 0.225 in. HD, 2 in. long ring shank nail	4 edge 8 field	2 × 4 wood ⁴	16	238
Shiplap	5/16	0.092 in. shank, 0.225 in. HD, 2 in. long ring shank nail	5 edge 8 field	2 × 4 wood ⁴	16	208
Shiplap	5/16	0.092 in. shank, 0.225 in. HD, 2 in. long ring shank nail	6 edge 8 field	2 × 4 wood ⁴	16	179
Shiplap	5/16	0.092 in. shank, 0.225 in. HD, 2 in. long ring shank nail	7 edge 8 field	2 × 4 wood ⁴	16	149
Shiplap	5/16	0.092 in. shank, 0.225 in. HD, 2 in. long ring shank nail	8 edge 8 field	2 × 4 wood ⁴	16	119
Hardipanel Hardiflex	5/16	0.091 in. shank, 0.225 in. HD, 1.5 in. long ring shank nail	4 edge 8 field	2 × 4 wood ³	16	198
Hardipanel Hardiflex	5/16	4d common 1-1/2 in. long	8	2 × 4 wood ⁵	16 & 24	120
Hardipanel Hardiflex	5/16	6d common 2 in. long	6	2 × 4 wood ⁵	16	200
Hardipanel Hardiflex	5/16	6d common 2 in. long	6	2 × 4 wood ⁵	24	153
Hardipanel Hardiflex	5/16	6d common 2 in. long	4	2 × 4 wood ⁵	16	233
Hardipanel Hardiflex	5/16	6d common 2 in. long	4	2 × 4 wood ⁵	24	212
Hardipanel Hardiflex	5/16	6d common 2 in. long	6 edge 12 field	2 × 4 wood ⁵	16	157
Hardipanel Hardiflex	5/16	6d common 2 in. long	6 edge 12 field	2 × 4 wood ⁵	24	145
Hardipanel Hardiflex Harditex Hardibacker	5/16	No. 11 ga. 1-1/2 in. long galvanized roofing nail	6	2 × 4 wood ⁵	16	200
Hardipanel Hardiflex Harditex Hardibacker	5/16	No. 11 ga. 1-1/2 in. long galvanized roofing nail	4 edge 12 field	2 × 4 wood ⁵	16	280

Table 3 — SHEAR VALUES ALLOWABLE LOADS IN POUNDS PER LINEAL FOOT FOR PANEL SHEAR WALLS^{1,2}

Product Type	Product Thickness (inch)	Fastener Type	Fastener Spacing (inch)	Frame Types	Stud Spacing (inch)	Shear Value (plf)
Hardipanel Hardiflex Harditex Hardibacker	5/16	No. 11 ga. 1-1/2 in. long galvanized roofing nail	3 edge 6 field	2 × 4 wood ⁵ w/48 in. mid-height block	16	340
Hardiflex Hardipanel Harditex Hardibacker Titan	7/16	No. 11 ga. 1-3/4 in. long galvanized roofing nail	6	2 × 4 wood ⁵	16	280
Hardiflex Hardisoffit	3/16	Min. No. 8 x 1 in. long × 0.323 in. HD ribbed buglehead screws	6	Min. No. 20 ga. × 3-5/8 in. × 1-3/8 in. metal C-stud	16	140 ⁶
Hardipanel Hardiflex Harditex Hardibacker Titan	1/4	Min. No. 8 x 1 in. long × 0.323 in. HD ribbed buglehead screws	6	Min. No. 20 ga. × 3-5/8 in. × 1-3/8 in. metal C-stud	16 & 24	125 ⁶
Hardipanel Hardiflex Harditex Hardibacker	5/16	Min. No. 8 x 1 in. long × 0.323 in. HD ribbed buglehead screws	6	Min. No. 20 ga. × 3-5/8 in. × 1-3/8 in. metal C-stud	16	160 ⁶
Hardipanel Hardiflex Harditex Hardibacker Titan	7/16	Min. No. 8 x 1 in. long × 0.311 in. HD ribbed buglehead screws	6	Min. No. 20 ga. × 3-5/8 in. × 1-3/8 in. metal C-stud	16	162 ⁶
Hardipanel Hardiflex Harditex	5/16	ET & F 1-1/2 in. long × 0.10" knurled shank × 0.25" HD pin fastener (AKN100-0150NA)	4 edge 8 field	Min. No. 20 ga. × 3-5/8 in. × 1-3/8 in. metal C-stud	16	154
Hardipanel Hardiflex Harditex	5/16	ET & F 1-1/2 in. long × 0.10" knurled shank × 0.25" HD pin fastener (AKN100-0150NA)	4 edge 8 field	Min. No. 20 ga. × 3-5/8 in. × 1-3/8 in. metal C-stud	24	133

1. All board edges shall be supported by framing. Panels shall be applied with the long dimension either parallel or perpendicular to studs.
2. The maximum height-to-length ratio for construction in this Table is 2:1.
3. Values are for species of wood having a specific gravity of 0.36 or greater.
4. Values are for species of wood having a specific gravity of 0.40 or greater.
5. Values are for species of wood having a specific gravity of 0.42 or greater, unless otherwise noted.
6. Under the *Uniform Building Code*TM, these steel-framed assemblies are limited to wind load resistance only.
7. 1 inch = 25.4 mm, 1plf = 14.59 N/m

Table 4 — "K" and "R" VALUES FOR FIBER-CEMENT PRODUCTS

Product Thickness ³ (inch)	Thermal Conductivity ¹ $K_{eff} = \text{Btu/hr-ft}^2\text{-}^\circ\text{F}$	Thermal Resistance ¹ $R = 1/K_{eff}$	Actual Thermal Conductivity ² (K_{eff})	Actual Thermal Resistance ² (R)
1/4	1.95	0.51	7.80	0.13
5/16	2.07	0.48	6.62	0.15
3/8	2.18	0.46	5.81	0.17
13/32	8.39	0.12	20.07	0.05
7/16	2.30	0.44	5.26	0.19

Notes to Table 4:

1. Based on 1 inch of panel thickness.
2. Actual value for panel thickness shown.
3. SI units conversion: 1 inch = 25.4 mm, 1 Btu/h-ft²-°F = 5.678 W/m²-K

Table 5 — PERMEANCE VALUES FOR FIBER-CEMENT PRODUCTS

Product Thickness ¹ (inch)	Permeance (perms)
1/4	1.75
5/16	1.54
3/8	1.32
13/32	2.84
7/16	1.10

Note to Table 5:

1. SI units conversion: 1 inch = 25.4 mm, 1 perm = 57 mg/(s·m²·Pa)

Table 6A
BOCA® National Building Code/1999
ALLOWABLE BASIC WIND SPEEDS (MILES PER HOUR) FOR
HARDISHINGLE™ CLADDING EXTERIOR WALL FINISH

Sheathing Type	Fastener Type	Weather Exposure and Fastener Location	Height of Building (feet)	Exposure Category	
				B	C
Minimum 15/32 inch thick plywood complying with DOC PS 1-95	Min. 0.121 in. shank x 0.371 in. HD x 1-1/4 in. long corrosion resistant roofing nail	8 inch exposure 2 roofing nails 9 inches from butt edge	0-15	110	95
			20	110	90
			40	110	80
			60	110	75
			100	80	
		200	70		
		7 inch exposure 2 roofing nails 8 inches from butt edge	0-15	110	110
			20	110	105
			40	110	95
60	110		90		
6 inch exposure 2 roofing nails 7 inches from butt edge	100	95	75		
	200	80	70		
	0-15	110	110		
	20	110	110		
	40	110	105		
60	110	100			
100	105	85			
200	90	75			

Table 6B
SBCCI - 1999 Standard Building Code®
ALLOWABLE BASIC WIND SPEEDS (MILES PER HOUR) FOR
HARDISHINGLE™ CLADDING EXTERIOR WALL FINISH

Sheathing Type	Fastener Type	Weather Exposure and Fastener Location	Height of Building (feet)	Exposure Category	
				Standard	Coastal
Minimum 15/32 inch thick plywood complying with DOC PS 1-95	Min. 0.121 in. shank x 0.371 in. HD x 1-1/4 in. long corrosion resistant roofing nail	8 inch exposure 2 roofing nails 9 inches from butt edge	0-15	105	105
			20	100	100
			40	90	90
			60	85	85
		7 inch exposure 2 roofing nails 8 inches from butt edge	0-20	110	110
			40	100	100
			60	95	95
		6 inch exposure 2 roofing nails 7 inches from butt edge	0-60	110	110
			100	75	75
200	70	70			

Table 6C
ICBO - 1997 Uniform Building Code™
ALLOWABLE BASIC WIND SPEEDS (MILES PER HOUR) FOR
HARDISHINGLE™ CLADDING EXTERIOR WALL FINISH

Sheathing Type	Fastener Type	Weather Exposure and Fastener Location	Height of Building (feet)	Exposure Category	
				B	C
Minimum 15/32 inch thick plywood complying with DOC PS 1-95	Min. 0.121 in. shank x 0.371 in. HD x 1-1/4 in. long corrosion resistant roofing nail	8 inch exposure 2 roofing nails 9 inches from butt edge	0-20	110	90
			40	100	80
			60	95	75
			100	90	70
			200	80	70
		7 inch exposure 2 roofing nails 8 inches from butt edge	0-20	110	105
			40	110	95
			60	110	90
			100	105	85
6 inch exposure 2 roofing nails 7 inches from butt edge	200	95	80		
	0-20	110	110		
	40	110	105		
	60	110	100		
	100	110	95		
200	100	90			

Notes to Tables 6A, 6B and 6C:

1. Table values are based on an importance factor of 1.0
2. 1 foot = 305 mm, 1 inch = 25.4 mm, 1 mph = 1.6 km/h

Table 7A
BOCA® National Building Code/1999
ALLOWABLE BASIC WIND SPEEDS (MILES PER HOUR) FOR
HARDISHINGLE™ CLADDING EXTERIOR WALL FINISH

Sheathing Type	Fastener Type	Weather Exposure and Fastener Location	Height of Building (feet)	Exposure Category	
				B	C
Minimum 7/16 inch thick OSB sheathing complying with DOC-PS 2-95	Min. 0.091 in. shank x 0.221 in. HD x 1-1/2 in. long corrosion resistant siding nail	8 inch exposure 2 siding nails 9 inches from butt edge	0-15	110	75
			20	110	75
			40	90	70
			60	85	
		7 inch exposure 2 siding nails 8 inches from butt edge	0-15	110	90
			20	110	85
			40	105	80
		6 inch exposure 2 siding nails 7 inches from butt edge	60	100	75
			0-15	110	100
20	110		95		
40	110		90		
60	110		80		
100	85	70			
200	75				

Table 7B
SBCCI - 1999 Standard Building Code®
ALLOWABLE BASIC WIND SPEEDS (MILES PER HOUR) FOR
HARDISHINGLE™ CLADDING EXTERIOR WALL FINISH

Sheathing Type	Fastener Type	Weather Exposure and Fastener Location	Height of Building (feet)	Exposure Category	
				Standard	Coastal
Minimum 7/16 inch thick OSB sheathing complying with DOC-PS 2-95	Min. 0.091 in. shank x 0.221 in. HD x 1-1/2 in. long corrosion resistant siding nail	8 inch exposure 2 siding nails 9 inches from butt edge	0-20	85	85
			40	75	75
			60	70	70
		7 inch exposure 2 siding nails 8 inches from butt edge	0-15	100	100
			20	95	95
			40	85	85
		6 inch exposure 2 siding nails 7 inches from butt edge	60	80	80
			0-20	110	110
			40	105	105
60	100	100			
100	70	70			

Table 7C
ICBO - 1997 Uniform Building Code™
ALLOWABLE BASIC WIND SPEEDS (MILES PER HOUR) FOR
HARDISHINGLE™ CLADDING EXTERIOR WALL FINISH

Sheathing Type	Fastener Type	Weather Exposure and Fastener Location	Height of Building (feet)	Exposure Category	
				B	C
Minimum 7/16 inch thick OSB sheathing complying with DOC-PS 2-95	Min. 0.091 in. shank x 0.221 in. HD x 1-1/2 in. long corrosion resistant siding nail	8 inch exposure 2 siding nails 9 inches from butt edge	0-15	100	75
			20	90	70
			40	85	
			60	80	
			100	70	
			0-15	110	90
		7 inch exposure 2 siding nails 8 inches from butt edge	20	110	85
			40	100	80
			60	90	75
			100	85	70
			200	70	
			0-20	110	95
6 inch exposure 2 siding nails 7 inches from butt edge	40	110	85		
	60	105	80		
	100	80			
	200	70			

Notes to Tables 7A, 7B, and 7C:

1. Table values are based on an importance factor of 1.0
2. 1 foot = 305 mm, 1 inch = 25.4 mm, 1 mph = 1.6 km/h

Table 8A
BOCA® National Building Code/1999
ALLOWABLE BASIC WIND SPEEDS (MILES PER HOUR) FOR
HARDISHINGLE™ CLADDING EXTERIOR WALL FINISH

Sheathing Type	Fastener Type	Weather Exposure and Fastener Location	Height of Building (feet)	Exposure Category	
				B	C
Minimum 7/16 inch thick OSB sheathing complying with DOC-PS 2-95	Min. 0.091 in. shank x 0.221 in. HD x 1-1/2 in. long corrosion resistant siding nail	8 in. exposure 3 siding nails per 12 in. wide, 9 in. from butt edge, 2 siding nails per 6 & 8 in. wide	0-15	110	90
			20	110	85
			40	100	75
			60	95	70
			100	75	
		7 in. exposure 3 siding nails per 12 in. wide, 8 inches from butt edge, 2 siding nails per 6 & 8 in. wide	0-15	110	105
			20	110	100
			40	110	90
			60	110	85
6 in. exposure 3 siding nails per 12 in. wide, 7 inches from butt edge, 2 siding nails per 6 & 8 in. wide	100	90	70		
	200	80			
	0-20	110	110		
	40	110	100		
	60	110	90		
		100	80		
		200	85	70	

Table 8B
SBCCI - 1999 Standard Building Code®
ALLOWABLE BASIC WIND SPEEDS (MILES PER HOUR) FOR
HARDISHINGLE™ CLADDING EXTERIOR WALL FINISH

Sheathing Type	Fastener Type	Weather Exposure and Fastener Location	Height of Building (feet)	Exposure Category	
				Standard	Coastal
Minimum 7/16 inch thick OSB sheathing complying with DOC-PS 2-95	Min. 0.091 in. shank x 0.221 in. HD x 1-1/2 in. long corrosion resistant siding nail	8 in. exposure 3 siding nails per 12 in. wide, 9 in. from butt edge, 2 siding nails per 6 & 8 in. wide	0-15	100	100
			20	95	95
			40	85	85
			60	80	80
		7 in. exposure 3 siding nails per 12 in. wide, 8 inches from butt edge, 2 siding nails per 6 & 8 in. wide	0-15	110	110
			20	105	105
			40	95	95
			60	90	90
6 in. exposure 3 siding nails per 12 in. wide, 7 inches from butt edge, 2 siding nails per 6 & 8 in. wide	0-15	110	110		
	20	110	110		
	40	110	110		
	60	105	105		
	100	70	70		

Table 8C
ICBO - 1997 Uniform Building Code™
ALLOWABLE BASIC WIND SPEEDS (MILES PER HOUR) FOR
HARDISHINGLE™ CLADDING EXTERIOR WALL FINISH

Sheathing Type	Fastener Type	Weather Exposure and Fastener Location	Height of Building (feet)	Exposure Category	
				B	C
Minimum 7/16 inch thick OSB sheathing complying with DOC-PS 2-95	Min. 0.091 in. shank x 0.221 in. HD x 1-1/2 in. long corrosion resistant siding nail	8 in. exposure 3 siding nails per 12 in. wide, 9 in. from butt edge, 2 siding nails per 6 & 8 in. wide	0-15	110	85
			20	110	80
			40	100	75
			60	90	70
			100	80	70
		7 in. exposure 3 siding nails per 12 in. wide, 8 inches from butt edge, 2 siding nails per 6 & 8 in. wide	200	70	
			0-15	110	110
			20	110	105
			40	110	100
6 in. exposure 3 siding nails per 12 in. wide, 7 inches from butt edge, 2 siding nails per 6 & 8 in. wide	60	110	95		
	100	100	80		
	200	90	75		
	0-15	110	110		
	20	110	105		
		40	110	100	
		60	110	95	
		100	105	90	
		200	95	85	

Notes to Tables 8A, 8B, and 8C:

1. Table values are based on an importance factor of 1.0
2. 1 foot = 305 mm, 1 inch = 25.4 mm, 1 mph = 1.6 km/h

Table 9A
SBCCI - 1999 Standard Building Code®
Allowable Fastener Spacing (in.)
Hardiplank Lap Siding fastened to ASTM C 90 Concrete Wall

Height of Building (feet)	6-1/4 and 6 inch wide Hardiplank	7-1/2 inch wide Hardiplank	8-1/4 and 8 inch wide Hardiplank	9-1/2 inch wide Hardiplank
0-15	18.25	14.5	13.75	11.5
20	16.5	13.25	12.25	10.5
30	14.75	11.75	11	9.25
40	13.5	10.75	10.25	8.5
50	12.75	10.25	9.5	8
60	12.25	9.75	9	7.5

Table 9B
BOCA® National Building Code/1999
Allowable Fastener Spacing (in.)
Hardiplank Lap Siding fastened to ASTM C 90 Concrete Wall

Height of Building (feet)	6-1/4 and 6 inch wide Hardiplank		7-1/2 inch wide Hardiplank		8-1/4 and 8 inch wide Hardiplank		9-1/2 inch wide Hardiplank	
	Exposure B	Exposure C	Exposure B	Exposure C	Exposure B	Exposure C	Exposure B	Exposure C
0-15	24.0	15.0	24.0	12.0	24.0	11.25	20.25	9.5
20	24.0	13.75	23.0	11.0	21.5	10.25	18.25	8.75
40	21.0	11.25	16.75	9.0	15.75	8.5	13.25	7.25
60	17.75	10.0	14.25	8.0	13.25	7.5	11.25	6.25
100	14.0	8.75	11.25	7.0	10.5	6.5	8.75	5.5

Table 9C
ICBO - 1997 Uniform Building Code™
Allowable Fastener Spacing (in.)
Hardiplank Lap Siding fastened to ASTM C 90 Concrete Wall

Height of Building (feet)	6-1/4 and 6 inch wide Hardiplank		7-1/2 inch wide Hardiplank		8-1/4 and 8 inch wide Hardiplank		9-1/2 inch wide Hardiplank	
	Exposure B	Exposure C	Exposure B	Exposure C	Exposure B	Exposure C	Exposure B	Exposure C
0-15	24.0	14.25	19.25	11.25	18.0	10.5	15.25	9.0
20	22.5	13.25	18.0	10.5	16.75	9.75	14.25	8.25
40	17.75	11.5	14.25	9.25	13.5	8.5	11.25	7.25
60	15.75	10.5	12.75	8.5	11.75	8.0	10.0	6.75
100	13.25	9.25	10.5	7.5	9.75	7.0	8.25	5.75

Notes to Table 9A, 9B, and 9C:

- Fasteners shall be ET&F Fastening Systems, Inc. Erico Stud nail, ET & F No. ASM-144-125, head dia. = 0.30 in., shank dia. = 0.14 in.
- Maximum basic wind speed shall be 110 mph.
- Exposure Category C (for Table 9A).
- 1 inch = 25.4 mm, 1 foot = 305 mm.

TOWN OF SEWALLS POINT

BUILDING DEPARTMENT - INSPECTION LOG

Date of Inspection Mon Tue Wed Thur Fri 12-23-09 Page 1 of 1

PERMIT #	OWNER/ADDRESS/CONTRACTOR	INSPECTION TYPE	RESULTS	COMMENTS
9317	Von Staden	Final		
	20 N Via Guendin		Pass	Cross
	Seaside Roof			

PERMIT #	OWNER/ADDRESS/CONTRACTOR	INSPECTION TYPE	RESULTS	COMMENTS
9320	Sellier	wall sheety		
	152 S River Rd		Pass	
	Stratton			

PERMIT #	OWNER/ADDRESS/CONTRACTOR	INSPECTION TYPE	RESULTS	COMMENTS
Tree	61 S Sewalls	Tree		
	Repair		OK	

PERMIT #	OWNER/ADDRESS/CONTRACTOR	INSPECTION TYPE	RESULTS	COMMENTS
9321	Watson	dry-in +		
HM	16 Riverview	metal	Pass	
	Onshore Roofing	Partial		

PERMIT #	OWNER/ADDRESS/CONTRACTOR	INSPECTION TYPE	RESULTS	COMMENTS

PERMIT #	OWNER/ADDRESS/CONTRACTOR	INSPECTION TYPE	RESULTS	COMMENTS

PERMIT #	OWNER/ADDRESS/CONTRACTOR	INSPECTION TYPE	RESULTS	COMMENTS

TOWN OF SEWALLS POINT

BUILDING DEPARTMENT - INSPECTION LOG

Date of Inspection Mon Tue Wed Thur Fri 2-5-10 Page 1 of 1

PERMIT #	OWNER/ADDRESS/CONTRACTOR	INSPECTION TYPE	RESULTS	COMMENTS
9353	SAORE 22 EMARITA M. SAAD INC.	UG. PLUMB UG. ELECT	PASS PASS	INSPECTOR <i>[Signature]</i>
9320	Sullivan 1625 River Rd Station	Final Stamp	PASS	Comments INSPECTOR <i>[Signature]</i>
PERMIT #	OWNER/ADDRESS/CONTRACTOR	INSPECTION TYPE	RESULTS	COMMENTS
				INSPECTOR
PERMIT #	OWNER/ADDRESS/CONTRACTOR	INSPECTION TYPE	RESULTS	COMMENTS
				INSPECTOR
PERMIT #	OWNER/ADDRESS/CONTRACTOR	INSPECTION TYPE	RESULTS	COMMENTS
				INSPECTOR
PERMIT #	OWNER/ADDRESS/CONTRACTOR	INSPECTION TYPE	RESULTS	COMMENTS
				INSPECTOR

9361

REROOF



TOWN OF SEWALL'S POINT BUILDING DEPARTMENT
 One S. Sewall's Point Road
 Sewall's Point, Florida 34996
 Tel 772-287-2455 Fax 772-220-4765

BUILDING PERMIT CARD

**THIS CARD MUST BE POSTED IN A CONSPICUOUS PLACE IN PLAIN VIEW FROM THE STREET PRIOR TO BEGINNING ANY WORK
 A FINAL INSPECTION IS REQUIRED FOR ALL PERMITS**

PERMIT NUMBER:	9361	DATE ISSUED:	FEBRUARY 4, 2010
SCOPE OF WORK:	ROOF REPAIR		
CONDITIONS :			
CONTRACTOR:	STUART ROOF REPAIR		
PARCEL CONTROL NUMBER:	133841-011-000-001209	SUBDIVISION	MARGUERITA - LOT 12
CONSTRUCTION ADDRESS:	162 S RIVER RD		
OWNER NAME:	SELLIAN		
QUALIFIER:	JAMES ARES	CONTACT PHONE NUMBER:	286-0444

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT. A CERTIFIED COPY OF THE RECORDED NOTICE OF COMMENCEMENT MUST BE SUBMITTED TO THE BUILDING DEPARTMENT PRIOR TO THE FIRST REQUESTED INSPECTION.

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN PUBLIC RECORDS OF THIS COUNTY, AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

**24 HOUR NOTICE REQUIRED FOR INSPECTIONS - ALL CONSTRUCTION DOCUMENTS MUST BE AVAILABLE ON SITE
 CALL 287-2455 - 8:00AM TO 4:00PM**

REQUIRED INSPECTIONS

UNDERGROUND PLUMBING	_____	UNDERGROUND GAS	_____
UNDERGROUND MECHANICAL	_____	UNDERGROUND ELECTRICAL	_____
STEM-WALL FOOTING	_____	FOOTING	_____
SLAB	_____	TIE BEAM/COLUMNS	_____
ROOF SHEATHING	_____	WALL SHEATHING	_____
TIE DOWN /TRUSS ENG	_____	INSULATION	_____
WINDOW/DOOR BUCKS	_____	LATH	_____
ROOF DRY-IN/METAL	_____	ROOF TILE IN-PROGRESS	_____
PLUMBING ROUGH-IN	_____	ELECTRICAL ROUGH-IN	_____
MECHANICAL ROUGH-IN	_____	GAS ROUGH-IN	_____
FRAMING	_____	METER FINAL	_____
FINAL PLUMBING	_____	FINAL ELECTRICAL	_____
FINAL MECHANICAL	_____	FINAL GAS	_____
FINAL ROOF	_____	BUILDING FINAL	_____

ALL RE-INSPECTION FEES AND ADDITIONAL INSPECTION REQUESTS WILL BE CHARGED TO THE PERMIT HOLDER. THE CONTRACTOR OR OWNER /BUILDER MUST SCHEDULE A FINAL INSPECTION. FAILURE TO RECEIVE A SUCCESSFUL FINAL INSPECTION WILL RESULT IN PERMIT RENEWAL FEES, FINES, AND OR DENIAL OF FUTURE BUILDING PERMITS TO THE CONTRACTOR OR OWNER /BUILDER.

RECEIVED
12-2-10

Town of Sewall's Point
BUILDING PERMIT APPLICATION

Permit Number: _____

Date: _____

OWNER/TITLEHOLDER NAME: MS Catherine Sellian Phone (Day) 9142732447 (Fax) 2202118

Job Site Address: 162 So. River Road City: Sewall's Pt State: FL Zip: 34996

Legal Desc. Property (Subd/Lot/Block) 133841-011-000-001209 Parcel Number: Marguerita Lot 12

Owner Address (if different): _____ City: _____ State: _____ Zip: _____

Scope of work: Repair Shingle Roof around chimney

WILL OWNER BE THE CONTRACTOR?

(If yes, Owner Builder questionnaire must accompany application)
YES _____ NO

COST AND VALUES (Required on ALL permit applications)

Estimated Value of Improvements: \$ 10,000
(Notice of Commencement required when over \$2500 prior to first inspection)

Has a Zoning Variance ever been granted on this property?
YES _____ (YEAR) _____ NO

Is subject property located in flood hazard area? V _____ A9 _____ A8 _____ X _____
FOR ADDITIONS, REMODELS AND RE-ROOF APPLICATIONS ONLY:

Estimated Fair Market Value prior to improvement: \$ _____
Fair Market Value of the Primary Structure only (Minus the land value) _____
*** PRIVATE APPRAISALS MUST BE SUBMITTED WITH PERMIT APPLICATION ***

CONTRACTOR/Company: Stuart Roof Repair inc Phone: 772 2860444 Fax: 772 879 0955

Street: P.O. Box 1269 City: Port Salerno State: FL Zip: 34992

State Registration Number: _____ State Certification Number: CC 132 6087 Municipality License Number: _____

PROJECT SUPERINTENDANT: _____ CONTACT NUMBER: 772 2860444

ARCHITECT _____ Lic.#: _____ Phone Number: _____

Street: N/A City: _____ State: _____ Zip: _____

ENGINEER _____ Lic# _____ Phone Number: _____

Street: _____ City: _____ State: _____ Zip: _____

AREA SQ. FOOTAGE (W/SEWER & ELECTRIC): Living: _____ Garage: _____ Covered Patios: _____ Screened Porch: _____

Carpport: _____ Total Under Roof _____ Wood Deck: _____ Accessory Building: _____

CODE EDITIONS IN EFFECT FOR THIS APPLICATION: Florida Building Code - Res., Build, Mech., Plmb., Fuel Gas: 2007 (W/2006 Rev.)
National Electrical Code: 2007 Florida Energy Code: 2007 Florida Accessibility Code: 2007 Florida Fire Prevention Code 2007

NOTICES TO OWNERS AND CONTRACTORS:

1. YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. WHEN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.
2. THERE ARE SOME PROPERTIES THAT MAY HAVE DEED RESTRICTIONS RECORDED UPON THEM. THESE RESTRICTIONS MAY LIMIT OR PROHIBIT THE WORK APPLIED FOR IN YOUR BUILDING PERMIT. IT IS TO YOUR ADVANTAGE AND RESPONSIBILITY TO DETERMINE IF YOUR PROPERTY IS ENCUMBERED BY ANY RESTRICTIONS. SOME RESTRICTIONS APPLICABLE TO THIS PROPERTY MAY BE FOUND IN THE PUBLIC RECORDS OF MARTIN COUNTY OR THE TOWN OF SEWALL'S POINT, AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.
3. BUILDING PERMITS FOR SINGLE FAMILY RESIDENCES AND SUBSTANTIAL IMPROVEMENTS TO SINGLE FAMILY RESIDENCES ARE VALID FOR A PERIOD OF 24 MONTHS. RENEWAL FEES WILL BE ASSESSED AFTER 24 MONTHS PER TOWN ORDINANCE 50-95.

THIS PERMIT WILL BECOME NULL AND VOID IF THE WORK AUTHORIZED BY THIS PERMIT IS NOT COMMENCED WITHIN 180 DAYS, OR WORK IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AT ANY TIME AFTER THE WORK IS COMMENCED. ADDITIONAL FEES WILL BE ASSESSED ON ALL NULL AND VOID PERMITS. REF. FBC 2004 W/ 2006 REVISIONS SECT. 105.4.1, 105.4.1.1 - .5.

I HEREBY CERTIFY THAT THE INFORMATION I HAVE FURNISHED ON THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND I AGREE TO COMPLY WITH ALL APPLICABLE CODES, LAWS AND ORDINANCES DURING THE BUILDING PROCESS.

*****A FINAL INSPECTION IS REQUIRED ON ALL BUILDING PERMITS*****

OWNER SIGNATURE (required)
Catherine Sellian

CONTRACTOR SIGNATURE (required)
James ARES

State of Florida, County of: Martin

On State of Florida, County of: Martin

This the 2nd day of Feb, 2010

This the 19th day of Jan, 2010

by Catherine Sellian who is personally

by James Ares who is personally

known to me or produced NYDL# 452-546-815

known to me or produced _____

as identification. Valerie Meyer

as identification. Valerie Meyer

My Commission Expires: _____

My Commission Expires: _____

Notary Public
VALERIE MEYER
MY COMMISSION # DD552119
EXPIRES 12/17/10

Notary Public
VALERIE MEYER
MY COMMISSION # DD552119
EXPIRES 12/17/10

SINGLE FAMILY PERMIT APPLICATIONS MUST BE ISSUED WITHIN 30 DAYS OF APPROVAL NOTIFICATION (FBC 105.3.4) ALL OTHER APPLICATIONS WILL BE CONSIDERED ABANDONED AFTER 180 DAYS (FBC 105.3.2) - PLEASE PICK UP YOUR PERMIT PROMPTLY!

Sewall's FAX POINT → 772-220-4765 fax



Martin County, Florida
Laurel Kelly, C.F.A

Site Provided by...
 governmax.com T1,14

Summary

print [navigation icons] Owner 1 of 6

Parcel Info

Summary

- Land
- Residential
- Improvement
- Commercial
- Image
- Sales & Transfers
- Assessments →
- Taxes →
- Exemptions →
- Parcel Map →
- Full Legal →

Parcel ID	Unit Address	Serial Index ID	Order	Commercial	Residential
13-38-41-011-000-00120-9	162 S RIVER RD	27873	Owner	0	1

Summary

Property Location 162 S RIVER RD
Tax District 2200 Sewall's Point
Account # 27873
Land Use 101 0100 Single Family
Neighborhood 120200
Acres 0.390

Legal Description
Property Information
 MARGUERITA S/D LOT 12

Search By

- Parcel ID
- Owner**
- Address
- Account #
- Use Code
- Legal Description
- Neighborhood
- Sales
- Map →

Owner Information
Owner Information
 SELLIAN, CAHTERINE A

Mail Information
 162 SOUTH RIVER RD
 STUART FL 34996

Assessment Info
Front Ft. 0.00

Market Land Value \$157,700
Market Impr Value \$179,050
Market Total Value \$336,750

Site Functions

- Property Search**
- Contact Us
- On-Line Help
- County Home
- Site Home
- County Login

Recent Sale
Sale Amount \$525,000

Sale Date 8/20/2003
Book/Page 1808 0024

Print | Back to List | << First < Previous Next > Last >>

Legal disclaimer / Privacy Statement

Data updated on 01/27/2010





TOWN OF SEWALL'S POINT BUILDING DEPARTMENT
One S. Sewall's Point Road
Sewall's Point, Florida 34996
Tel 772-287-2455 Fax 772-220-4765

**RESIDENTIAL REROOF WINDSTORM LOSS
MITIGATION CERTIFICATION
(FLORIDA STATUTE 553.844)**

The following information is to be provided by roofing contractor or owner/builder on all re-roof applications for the purpose of obtaining compliance with recent changes to State Statute and referenced "Hurricane Mitigation Manual". Effective date: October 1, 2007.

Note: These requirements apply to residential structures built prior to implementation of the FBC on March 1, 2002.

- Value: show proof of insured value of residential structure or a copy of the ad-valorem tax value.
- Provide copy of contract

All re-roofs regardless of value shall comply with the following:

Re-nailing: All sheathing and decking shall be re-nailed per section 201.1 and a secondary water barrier installed.

- Existing fasteners that are 8d clipped head, round head or ring shank and spaced 6 in. or less o.c. may be counted. Additional fasteners shall be 8d ring shank nails with round heads spaced at 6 in. o.c. along framing.
- Indicate below which method is to be used to satisfy the secondary water barrier requirements:

_____ All joints in roof sheathing shall be covered with a minimum of 4 in. strip of self-adhering polymer modified bitumen tape. Wood deck and self-adhering tape shall be covered by one layer of approved underlayment.

_____ Entire roof deck shall be covered with an approved self-adhering polymer modified bitumen cap sheet. No additional underlayment is required.

_____ Exception: An approved 30# underlayment installed per HVHZ using nails and tin-tags and covered with an approved self-adhering polymer modified bitumen cap sheet or an approved cap sheet hot-mopped shall be deemed to meet the requirements for secondary water barrier.

Residential Structures valued at \$300,000 or more shall comply with the following:

- Roof to wall connections must be enhanced up to 15% additional cost of the re-roofing cost.
- A certified or registered general, building or residential contractor compliance affidavit must accompany the re-roof permit application and submit details to perform the following:
 1. Sufficient amount of eave sheathing shall be removed to view 6 ft. of roof rafters.
 2. Wherever a strap is missing or an existing strap has fewer than 4 fasteners on each end of connection with the wall, the connection shall be strengthened by adding:
 - a. Metal connectors, clips, straps and fasteners to achieve an uplift capacity as specified in Table 201.3 OR
 - b. Approved strap ties or right angle gusset brackets with a minimum uplift capacity of 500 lbs shall be installed to the top plate or masonry wall below
 - c. Refer to sections 201.3.1 to 201.3.4 for prescriptive requirements.



TOWN OF SEWALL'S POINT BUILDING DEPARTMENT
 One S. Sewall's Point Road
 Sewall's Point, Florida 34996
 Tel 772-287-2455 Fax 772-220-4765

NA

**LICENSED GENERAL, BUILDING OR RESIDENTIAL CONTRACTORS'
 REROOF WINDSTORM LOSS MITIGATION COMPLIANCE AFFIDAVIT**

A residential Structure valued at \$300,000 or more shall comply with the following:

- Roof to wall connections must be enhanced up to 15% additional cost of the reroofing cost.
- A certified or registered general, building or residential contractor compliance affidavit must accompany the re-roof permit application and submit details to perform the following:
 1. Sufficient amount of eave sheathing shall be removed to view 6 ft. of roof rafters.
 2. Wherever a strap is missing or an existing strap has fewer than 4 fasteners on each end of connection with the wall, the connection shall be strengthened by adding:
 - a. Metal connectors, clips, straps and fasteners to achieve an uplift capacity as specified in Table 201.3 OR
 - b. Approved strap ties or right angle gusset brackets with a minimum uplift capacity of 500 lbs shall be installed to the top plate or masonry wall below
 - c. Refer to sections 201.3.1 to 201.3.4 for prescriptive requirements.

TO BE COMPLETED IF INSURED VALUE OF SINGLE FAMILY IS OVER \$300,000 AND WAS PERMITTED PRIOR TO MARCH 1, 2002.

YEAR PERMITTED _____ INSURED OR P.A. IMPROVED VALUE \$ _____

DETAILS OF MITIGATION WORK TO BE PERFORMED (Add additional sheets if necessary):

JOB SITE ADDRESS: _____

QUALIFIER NAME: _____ LICENSE NO.: _____

COMPANY NAME: _____ PHONE NO.: _____

 Qualifier's Signature

 Owner's Signature

Date: _____

Date: _____

Sworn to and subscribed before me
 this ____ day of _____ 20 ____

Sworn to and subscribed before me
 this ____ day of _____ 20 ____

By _____

By _____

 Notary Public, State of Florida
 Personally known to me _____
 Produced ID _____
 Type: _____

 Notary Public, State of Florida
 Personally known to me _____
 Produced ID _____
 Type: _____



TOWN OF SEWALL'S POINT BUILDING DEPARTMENT
 One S. Sewall's Point Road
 Sewall's Point, Florida 34996
 Tel 772-287-2455 Fax 772-2204765

RE-ROOF PERMIT CERTIFICATION

PERMIT # _____

CONTRACTOR'S NAME: Stuart R. / Ryan Inc PHONE # 772 2860444 FAX: 772 2879095

OWNER'S NAME: M/S Catherine Sellian

CONSTRUCTION ADDRESS: _____ CITY _____ STATE _____

RE-ROOF: RESIDENTIAL (SINGLE FAMILY)

____ COMMERCIAL **--REMOVE/REINSTALL ROOF TOP HVAC EQUIP ____ YES ____ NO

**...DISCONNECT/RECONNECT HVAC ELECTRIC ____ YES ____ NO

** REQUIRES A CONTRACTOR VERIFICATION FORM (HVAC AND/OR ELECTRICAL) W/ PERMIT APPLICATION

RE-ROOF DEEMED TO COMPLY WITH 553.844 F. S. ____ YES ____ NO - INSURED VALUE OF RESIDENCE _____

RE-ROOF INSPECTION AFFIDAVIT TO BE PROVIDED IN LIEU OF BUILDING DEPARTMENT INSPECTION ____ YES ____ NO

ROOF TYPE: HIP ____ BOSTON-HIP ____ GABLE ____ FLAT ____ OTHER _____

ROOF PITCH: 4 /12 SLOPE

ROOF DECK: * ____ SHEATH-OVER - (APPLYING PLYWOOD PANELS OVER EXISTING SPACED

____ RE-SHEATH - (REMOVAL OF SPACED SHEATHING/PLYWOOD FOR APPLICATION OF NEW PLYWOOD PANELS) - REQUIRES USE OF MINIMUM THICKNESS AS PER FLORIDA BUILDING CODE "2004".

____ SPACED SHEATH FILL-IN - SPACES BETWEEN EXISTING SPACED-SHEATHING BOARD MAY BE FILLED-IN WITH BOARDS OF THE SAME SIZE AND THICKNESS TO PROVIDE A CLOSELY FITTED SOLID DECK NAIL NEW BOARDS AS PER FLORIDA BUILDING CODE "2004".

____ EXISTING DECK TO REMAIN/REPAIRED & RENAILED

FILE COPY
TOWN OF SEWALL'S POINT
 THESE PERMITS HAVE BEEN
 REVIEWED FOR CODE COMPLIANCE
 DATE 2-4-10
BUILDING OFFICIAL

EXISTING ROOF COVERING: Asph/Flt EXISTING COVERING TO BE REMOVED? YES ____ NO

PROPOSED NEW ROOF COVERING: Same Oldways - Manufactured in Mexico

MANUFACTURER _____ PRODUCT NAME _____ PRODUCT APPR # _____

(APPROVED ROOF COVERING MATERIAL WITH CURRENT FLORIDA PRODUCT APPROVAL)
 MANUFACTURER'S INSTALLATION SPECS MUST BE ON THE JOB SITE AT TIME OF INSPECTION.

*WHEN CONCRETE/CLAY TILES REPLACE ANY OTHER TYPE OF ROOF COVERING, THE EXISTING TRUSSES SHALL BE INSPECTED BY A FLORIDA REGISTERED ARCHITECT OR ENGINEER TO VERIFY ADEQUACY OF THE TRUSSES TO SUPPORT INCREASED DEAD LOADS. AN ENGINEERING INSPECTION REPORT SHALL BE SUBMITTED WITH THE PERMIT APPLICATION.

PROPOSED FLASHING: ____ GALV./STEEL ____ ALUMINUM ____ COPPER ____ OTHER Asph/Flt

RIDGEVENT TO BE INSTALLED: ____ YES ____ NO

DESCRIPTION OF WORK: To Repair a location of concrete which is leaking => (No Siding to be done)

I CERTIFY THAT ALL THE FOREGOING INFORMATION IS ACCURATE AND THAT ALL WORK WILL BE DONE IN COMPLIANCE WITH ALL APPLICABLE LAWS REGULATING CONSTRUCTION AND ZONING.

SIGNATURE OF CONTRACTOR _____ DATE: 1-15-10



ROOFING MATERIAL LIST

Note * there is no. N.O.A. for dimensional shingles of less than 40 year shingles - except that which is below

NO	MATERIAL	QUANTITY	UNIT	REMARKS
0	GAF Timberline 30 shingles	25	SQ	EXAMPLE
	GAF Timberline Prestige 30 year.			
	to replace those shingles which are pulled from around chimney -			
	Amount is unknown - because of the difficulty of removal -			
	The difficulty is unknown until the attempt is made.			

**TOWN OF SEWALL'S POINT
 BUILDING DEPARTMENT
 FILE COPY**

existing shingle roof is dimensional

total to

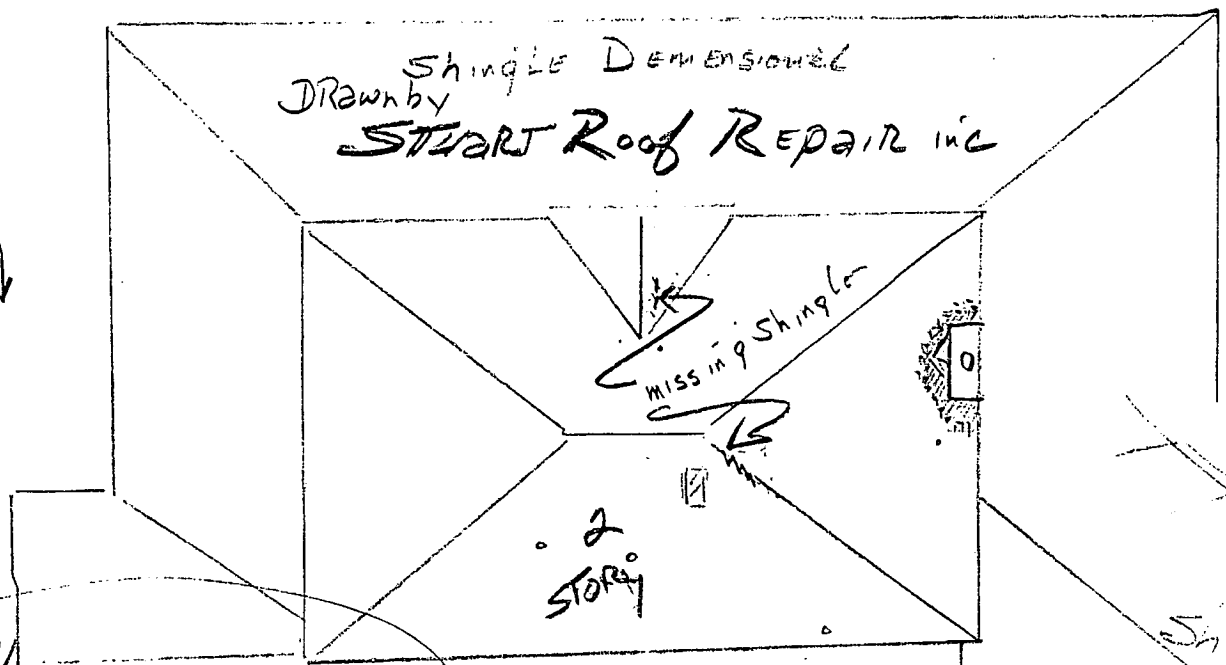
PH# 2202118

Ms. Catherine Sellian
162 So River Road
Sewall's Point FL 34996

FRONT

Shingle Dimensioned
Drawn by
STUART Roof Repair inc

DRIVEWAY



NOTE!!!
steep slope
Danger of falling

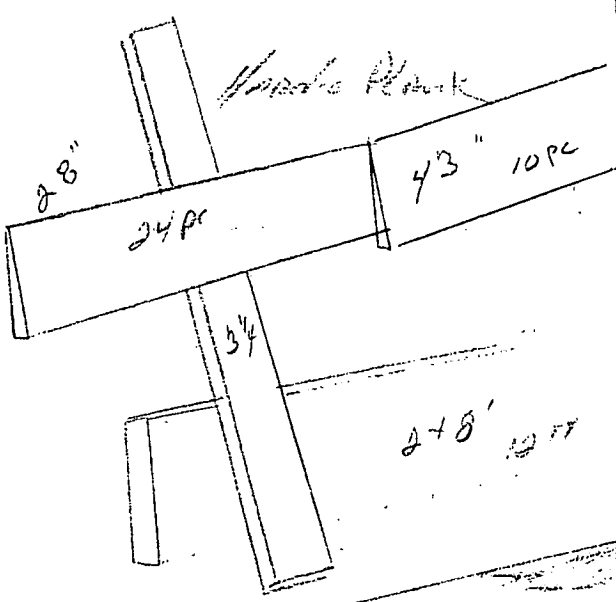
Shingles ARE
weather wood

Patio Deck
REAR

NOT TO SCALE

ROTTER 2x8

chimney siding
compartment Card Box



ROTTER
DANGER

N A / 050

TOWN OF SEWALL'S POINT
BUILDING DEPARTMENT
FILE COPY

NOTE*
Siding to be repaired
on W-S-E side of chimney
on upper level

STUART ROOF REPAIR INC.

April 27, 2009

Town of Sewall's Point Building Department
One So. Sewall's Point Road
Sewall's Point, Fl. 34996

To Whom It May Concern:

Stuart Roof Repair Inc. has been informed that the Town of Sewall's Point requires an affidavit that the job site decking for the roofing meets hurricane mitigation retrofit manual (based on 553.844F.S.) It should be understood repair to fix leakage does not always require removal of surfaces in sufficient amounts to make such a determinant examination. It is our professional opinion that such a request is more for the work where an addition or a remodeling job is taking place. A standard valley repair, exhaust fan, roof return, soil vent plumbing and any one of the many repairs, which may not require wood, work, but are necessary to maintain a watertight roof system is not of any size, which could retrofit the whole of the roof system. This hurricane mitigation retrofit (553.844 F.S.) is with the intent to up grade and be of benefit to the roof system as a whole. It should be understood that should a major storm (i.e.) hurricane cause the failure of the roof system, it is very unlikely that a small repair will not save the roof and should the roof fail, the new repair will not be standing mid air all by it self. The intend for this 553.844 F.S. is meant for an area approximately of 1/3% to 25% of total roof area.

Stuart Roof Repair Inc. made the effort to attempt to explain the situation to Mr. Adams of the Building Department at Sewall's Point. Mr. Adams was shown the repair, which was being installed and was shown the few openings made through the underlayment of #90 mineral roll roofing. The opening was not of sufficient size to allow for a determination of nailing pattern nor type of nail anchor. Mr. Adams was told of our standard practice of following the International Construction Code, repair is meant to be equal to or better than the current roof system being repaired. Stuart Roof Repair Inc. reiterates our repair was not of sufficient size to determine whether decking was of appropriate requirement for 553.844F.S.

Respectfully submitted,

TOWN OF SEWALL'S POINT
BUILDING DEPARTMENT
FILE COPY

Mr. James Ares, President
Stuart Roof Repair Inc.
#CCC1326087

**STUART
ROOF
REPAIR INC.**

PO Box 1269

Port Salerno FL 34992-1269

772-286-0444 772-879-0955

*verbal to do work
estimate to do work
7-11-09 9:45 AM*

PROPOSAL SUBMITTED TO: Ms. Cather Sellian		PHONE 914-273-2447 / 220-2118	DATE December 4, 2009
STREET 2 Cider Mill Cir.		JOB NAME	
CITY, STATE AND ZIP CODE Armonk, NY 10504		JOB LOCATION 162 South River Road	
ARCHITECT	DATE OF PLANS	JOB PHONE Sewall's Point, Fl.	

We hereby submit specifications and estimates for:

~~To remove fiberboard planking on three (3) sides of the upper story chimney. This location of concern has damaged 3 1/4 trim board and composite type siding. The 2X8 trim molding is rotten and has pulled open. All of the above does allow water and weather elements into structure. To cut back dimensional shingles form around chimney and cricket. Contractor to salvage metal flashing as necessary or required. Roofing contractor will wire brush heavy rust and scale from the top chimney cap. (See *note regarding rust damage of chimney cap.) Roofing contractor to obtain Hardee plank siding and trim board of Hardee plank. To dry in with new #30 and install the Hardee plank once new siding is in place to caulk.~~
To install a built-up mastic flashing and seal. Mastic flashing to incorporate several layers of a fiber/mesh membrane for added strength. To relay shingles where having been pulled for repair and paint metal chimney cap and siding.

Price \$2,850.00

\$1,975.00

***NOTE:**

Should woodwork be required, said woodwork will be figured as time and material. Labor @ \$85.50 per man-hour and material @ \$cost plus 20%. Wood for chimney siding and trim is figured as part of proposal's price. All additional work (i.e.) plywood decking, structural frame will be figured ad time and material.

***NOTE:**

It is understood color/style variations may occur between replacement shingles and existing weathered shingle roof.

***NOTE:**

Roofing contractor has submitted this proposal based upon the idea that chimney metal cap is capable of being salvaged. It should be understood, that upon chipping and wire brushing or rusted cap, might find that it is not salvageable. Should this be the case and a new chimney cap be required, said cap will be fabricated. This additional work and cost will be figured separate to this proposal.

***NOTE:**

Contractor has told homeowner of the missing shingles and of the two (2) damage areas of concern. Repair and replacement of shingles will be done as part of above proposal.

WARRANTY:

Warranty is for 1 year. Said warranty is for actual repair surface being installed. Warranty is narrow in scope; NO stated or inferred liability is assumed for roof/roofs as a whole.

We propose hereby to furnish material and labor - complete in accordance with above specifications, for the sum of *\$1,975.00*
Two thousand eight hundred fifty and no/100 Dollars (\$2,850.00)

Payment to be made as follows: <u>1/2 upon starting job and</u> <u>balance upon completion.</u>	We shall not be responsible for damages to exterior or interior fixtures, household furnishings, decorations equipment due to leakage, however caused. VERBAL AGREEMENTS OR OTHER AGREEMENTS NOT APPEARING UPON THIS CONTRACT WILL NOT BE RECOGNIZED. All agreements contingent upon strikes, weather, or other conditions beyond the control of the contractor.
---	--

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above sepecifications involving extra costs will be executed only upon written orders, and will become an extra-charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tomado, and other necessary insurances.	Authorized Signature _____ #CCC1326087 Note: This proposal may be withdrawn by us if not accepted within 30 days.
--	--

Acceptance of Proposal - The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Date of Acceptance: _____ Signature _____



BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

GAF Materials Corp.
1361 Alps Rd.
Wayne, NJ 07470

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by the BCCO and accepted by the Building Code and Product Review Committee to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The BCCO (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BCCO reserves the right to revoke this acceptance, if it is determined by BCCO that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: GAF-Elk Timberline Prestique 30 Shingle

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This revises NOA #07-0507.12 and consists of pages 1 through 5.
The submitted documentation was reviewed by Alex Tigera.



NOA No.:08-1110.07
Expiration Date: 02/21/12
Approval Date: 03/04/09
Page 1 of 5

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: 07310 Asphalt Shingles
Materials: Dimensional
Deck Type: Wood

1. SCOPE

This revises GAF-Elk Timberline Prestique 30 as manufactured by GAF Materials Corp described in Section 2 of this Notice of Acceptance.

2. PRODUCT DESCRIPTION

<u>Product</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
GAF-Elk Timberline Prestique 30	13 ¹ / ₄ " x 39 ³ / ₈ "	TAS 110	Fiberglass reinforced heavy weight asphalt roof shingle, with a laminate profile

3. EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Underwriters Laboratories, Inc.	ASTM D3462	05CA47541	11/10/06
Underwriters Laboratories, Inc.	ASTM D3462	06CA31580	11/30/06
PRI Asphalt Technologies, Inc.	ASTM D3462	GAF-101-02-02	11/02/05
Underwriters Laboratories, Inc.	ASTM D3462	06NK05159	08/09/06
PRI Asphalt Technologies, Inc.	ASTM D3462	GAF-098-02-02	11/08/05
Underwriters Laboratories, Inc.	ASTM D3462	02NK41809	08/11/02
Underwriters Laboratories, Inc.	ASTM D3462	03NK26444	10/17/03
Center for Applied Engineering	ASTM D3462	257989	05/13/97
Underwriters Laboratories, Inc.	TAS 107	01NK45803	04/13/94
Underwriters Laboratories, Inc.	TAS 107	06NK05159	08/09/06
Underwriters Laboratories, Inc.	TAS 107	04NK04273	02/20/04
Underwriters Laboratories, Inc.	TAS 107	05CA42840	11/11/05
Underwriters Laboratories, Inc.	TAS 107	02NK41811	11/11/02
Underwriters Laboratories, Inc.	TAS 107	03CA35209	10/17/03
Underwriters Laboratories, Inc.	TAS 107	04CA13850	08/30/04
Center for Applied Engineering	TAS 100	257989	04/01/97
PRI Asphalt Technologies, Inc.	TAS 100	GAF-044-02-01	01/13/04
PRI Asphalt Technologies, Inc.	TAS 100	GAF-101-02-01	11/09/05
PRI Asphalt Technologies, Inc.	TAS 100	GAF-116-02-02	03/23/06
PRI Asphalt Technologies, Inc.	TAS-100	ELK-083-02-01	10/16/02
		ELK-084-02-01	10/15/02
		ELK-085-02-01	10/14/02
		ELK-086-02-01	10/24/02
		ELK-087-02-01	10/21/02
		ELK-088-02-01	10/16/02
		ELK-107-02-01	10/09/03
		ELK-108-02-01	10/09/03
		ELK-109-02-01	10/09/03



NOA No.:08-1110.07
 Expiration Date: 02/21/12
 Approval Date: 03/04/09
 Page 2 of 5

4. LIMITATIONS

- 4.1 Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
- 4.2 Shall not be installed on roof mean heights in excess of 33 ft.
- 4.3 All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9B-72 of the Florida Administrative Code.

5. INSTALLATION

- 5.1 Shingles shall be installed in compliance with Roofing Application Standard RAS 115.
- 5.2 Flashing shall be in accordance with Roofing Application Standard RAS 115
- 5.3 The manufacturer shall provide clearly written application instructions.
- 5.4 Exposure and course layout shall be in compliance with Detail 'A', attached.
- 5.5 Nailing shall be in compliance with Detail 'B', attached.

6. LABELING

- 6.1 Shingles shall be labeled with the Miami-Dade Seal or the wording "Miami-Dade County Product Control Approved".



7. BUILDING PERMIT REQUIREMENTS

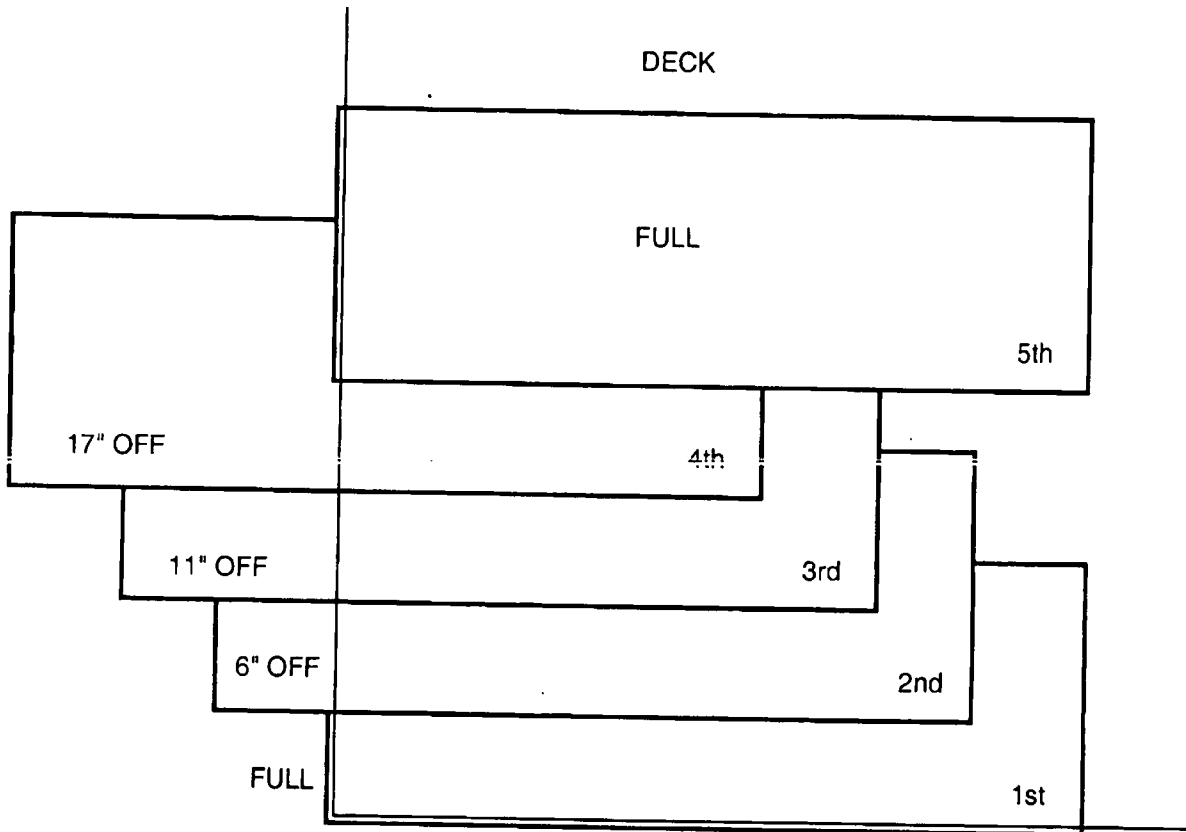
- 7.1 Application for building permit shall be accompanied by copies of the following:
 - 7.1.1 This Notice of Acceptance.
 - 7.1.2 Any other documents required by the Building Official or the applicable code in order to properly evaluate the installation of this system.

8. MANUFACTURING PLANTS

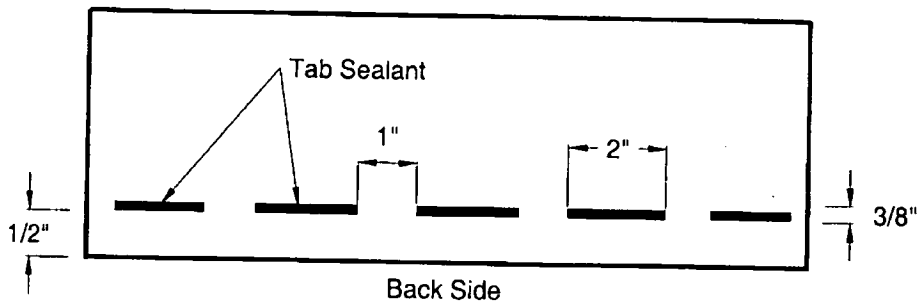
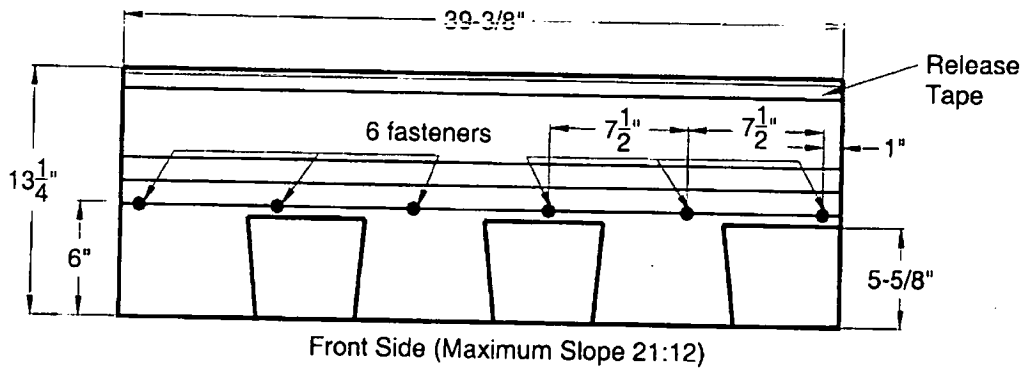
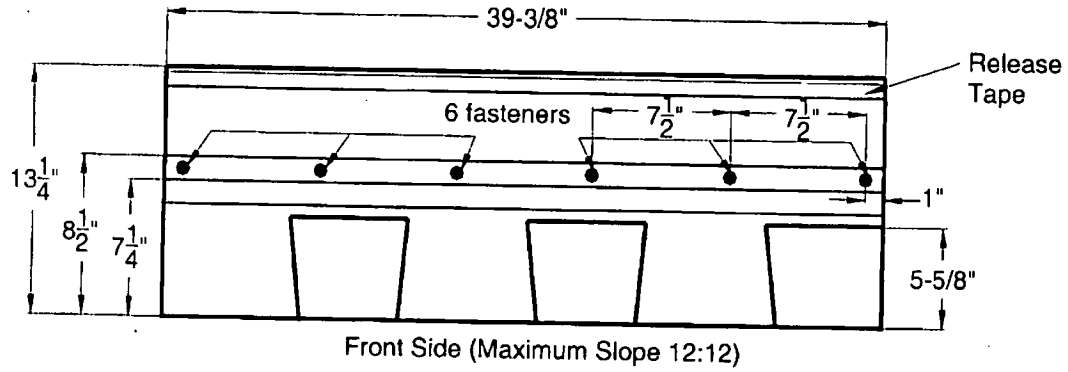
- 8.1 Tampa, FL
- 8.2 Michigan City, IN
- 8.3 Mobile, AL
- 8.4 Baltimore, MD
- 8.5 Myerstown, PA
- 8.6 Ennis, TX
- 8.7 Tuscaloosa, AL
- 8.8 Dallas, TX



DETAIL A



DETAIL B



END OF THIS ACCEPTANCE



TOWN OF SEWALLS POINT

BUILDING DEPARTMENT - INSPECTION LOG

Date of Inspection Mon Tue Wed Thur Fri 2-23-10 Page 1 of 1

PERMIT #	OWNER/ADDRESS/CONTRACTOR	INSPECTION TYPE	RESULTS	COMMENTS
9287	SPARF	Window Sills	PASS	
	73 N. STRO Stratton	Column Pads	PASS	INSPECTOR <i>JA</i>
9377 1400	DEMITRIU			
100	11 PARDWINKLE SUMNER	FINAL DOTS	PASS	Close INSPECTOR <i>JA</i>
9361 1400	STUART 162 S RIVER STUART	INSPECTION	PASS	INSPECTOR <i>JA</i>
	Bailey	Code regarding trees		INSPECTOR <i>AK</i>
	3 Palama Way			
				INSPECTOR
				INSPECTOR
				INSPECTOR
				INSPECTOR

TOWN OF SEWALLS POINT

BUILDING DEPARTMENT - INSPECTION LOG

Date of Inspection Mon Tue Wed Thur Fri **4-5-10** Page 1 of 1

PERMIT #	OWNER/ADDRESS/CONTRACTOR	INSPECTION TYPE	RESULTS	COMMENTS
9376	Marney 121 Hillcrest Dr JA Taylor	Final Roof	FAIL RECEIVED	SEE CORRECTION NOTICE INSPECTOR <i>AK</i>
9287	Sharfi 73 N Sewalls Stratton	Lathe	PASSED	INSPECTOR <i>A</i>
9287	Stuart Roof Repair	Final Roof	RECEIVED TUES	NOISE TESTED
9287	SPARFI 93 N SPTRD STRATTON	Plumbing ROOF	PASS	INSPECTOR <i>A</i>
	- 17 S. VIA LUCINDA C.E. - 20 N. VIA LUCINDA C.E.		WEEDS GARBAGE PAILS	PHOTOS - LETTER CHECK TUES & WED
9362	Longmaid 66 S Sewalls Scott Holmes	rough plumb " elean " framing window/door track !!	PASS	INSPECTOR <i>A</i>
				INSPECTOR <i>AK</i>
				INSPECTOR <i>AK</i>

9425

PATIO



TOWN OF SEWALL'S POINT BUILDING DEPARTMENT
 One S. Sewall's Point Road
 Sewall's Point, Florida 34996
 Tel 772-287-2455 Fax 772-220-4765

BUILDING PERMIT CARD

THIS CARD MUST BE POSTED IN A CONSPICUOUS PLACE IN PLAIN VIEW FROM THE STREET PRIOR TO BEGINNING ANY WORK. A FINAL INSPECTION IS REQUIRED FOR ALL PERMITS.

PERMIT NUMBER:	9425	DATE ISSUED:	MAY 5, 2010
SCOPE OF WORK:	FLGSTONE PATIO		
CONDITIONS:			
CONTRACTOR:	STRATICON		
PARCEL CONTROL NUMBER:	133841-011-000-001209	SUBDIVISION	MARGUERITA - LOT 12
CONSTRUCTION ADDRESS:	162 S RIVER RD		
OWNER NAME:	SELLIAN		
QUALIFIER:	JEFF HARDIN	CONTACT PHONE NUMBER:	954-243-7290

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT. A CERTIFIED COPY OF THE RECORDED NOTICE OF COMMENCEMENT MUST BE SUBMITTED TO THE BUILDING DEPARTMENT PRIOR TO THE FIRST REQUESTED INSPECTION.

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN PUBLIC RECORDS OF THIS COUNTY, AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

24 HOUR NOTICE REQUIRED FOR INSPECTIONS - ALL CONSTRUCTION DOCUMENTS MUST BE AVAILABLE ON SITE CALL 287-2455 - 8:00AM TO 4:00PM

REQUIRED INSPECTIONS

UNDERGROUND PLUMBING	_____	UNDERGROUND GAS	_____
UNDERGROUND MECHANICAL	_____	UNDERGROUND ELECTRICAL	_____
STEM-WALL FOOTING	_____	FOOTING	_____
SLAB	_____	TIE BEAM/COLUMNS	_____
ROOF SHEATHING	_____	WALL SHEATHING	_____
TIE DOWN /TRUSS ENG	_____	INSULATION	_____
WINDOW/DOOR BUCKS	_____	LATH	_____
ROOF DRY-IN/METAL	_____	ROOF TILE IN-PROGRESS	_____
PLUMBING ROUGH-IN	_____	ELECTRICAL ROUGH-IN	_____
MECHANICAL ROUGH-IN	_____	GAS ROUGH-IN	_____
FRAMING	_____	METER FINAL	_____
FINAL PLUMBING	_____	FINAL ELECTRICAL	_____
FINAL MECHANICAL	_____	FINAL GAS	_____
FINAL ROOF	_____	BUILDING FINAL	_____

ALL RE-INSPECTION FEES AND ADDITIONAL INSPECTION REQUESTS WILL BE CHARGED TO THE PERMIT HOLDER. THE CONTRACTOR OR OWNER /BUILDER MUST SCHEDULE A FINAL INSPECTION. FAILURE TO RECEIVE A SUCCESSFUL FINAL INSPECTION WILL RESULT IN PERMIT RENEWAL FEES, FINES, AND OR DENIAL OF FUTURE BUILDING PERMITS TO THE CONTRACTOR OR OWNER /BUILDER.



TOWN OF SEWALL'S POINT BUILDING DEPARTMENT
 One S. Sewall's Point Road
 Sewall's Point, Florida 34996
 Tel 772-287-2455 Fax 772-220-4765

BUILDING PERMIT RECEIPT

PERMIT NUMBER:	9425		
ADDRESS	162 S RIVER RD		
DATE:	5/5/10	SCOPE:	FLAGSTONE PATIO

SINGLE FAMILY OR ADDITION /REMODEL	Declared Value	\$	
Plan Submittal Fee (\$350.00 SFR, \$175.00 Remodel < \$200K) (No plan submittal fee when value is less than \$100,000)		\$	
Total square feet air-conditioned space: (@ \$110.25 per sq. ft.)		s.f.	
Total square feet non-conditioned space: (@ \$51.60 per sq. ft.)		s.f.	
Total Construction Value:		\$	
Building fee: (2% of construction value SFR or >\$200K)		\$	
Building fee: (1% of construction value < \$200K + \$75 per insp.)			
Total number of inspections (Value < \$200K) @\$75 ea.		\$	
Radon Fee (\$.005 per sq. ft. under roof):		\$	
DBPR Licensing Fee: (\$.005 per sq. ft. under roof)		\$	
Road impact assessment: (.04% of construction value - \$5.00 min.)			
Martin County Impact Fee:		\$	
TOTAL BUILDING PERMIT FEE:		\$	

ACCESSORY PERMIT	Declared Value:	\$	
			1000
Total number of inspections @ \$75.00 each		\$	75
Road impact assessment: (.04% of construction value - \$5.00 min.)		\$	5
TOTAL ACCESSORY PERMIT FEE:		\$	80 pd cash

Town of Sewall's Point BUILDING PERMIT APPLICATION

Permit Number: 9425

Date: 5/1/10

OWNER/TITLEHOLDER NAME: CATHERINE SELLAN Phone (Day) (914) 273-2447 (Fax) _____

Job Site Address: 162 S. RIVER ROAD City: SEWALL'S POINT State: FL Zip: _____

Legal Description _____ Parcel Control Number: _____

Owner Address (if different): SAME City: _____ State: _____ Zip: _____

Scope of work (please be specific): FLAGSTONE PATIO

WILL OWNER BE THE CONTRACTOR?
(If yes, Owner Builder questionnaire must accompany application)
YES _____ NO X

Has a Zoning Variance ever been granted on this property?
YES _____ (YEAR) _____ NO X
(Must include a copy of all variance approvals with application)

COST AND VALUES: (Required on ALL permit applications)
Estimated Value of Improvements: \$ 1,100.00
(Notice of Commencement required when over \$2500 prior to first inspection, \$7,500 on HVAC change out)
Is subject property located in flood hazard area? VE10 AE9 AE8 X
FOR ADDITIONS, REMODELS AND RE-ROOF APPLICATIONS ONLY:
Estimated Fair Market Value prior to improvement: \$ _____
(Fair Market Value of the Primary Structure only, Minus the land value)
PRIVATE APPRAISALS MUST BE SUBMITTED WITH PERMIT APPLICATION

CONTRACTOR/Company: STRATICON CONSTRUCTION Phone: (954) 243-7290 Fax: _____

Street: 27 S. RIVER RD. City: SEWALL'S POINT State: FL Zip: _____

State License Number: CGC 062578 OR: Municipality: _____ License Number: _____

LOCAL CONTACT: BRENT T. STOLTENBERG Phone Number: (772) 882-5611

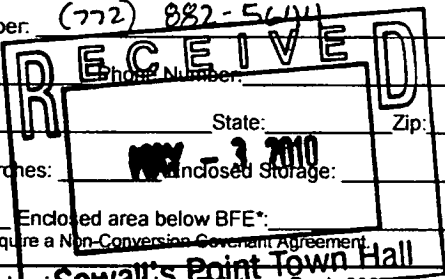
DESIGN PROFESSIONAL: N/A Lic# _____ Phone Number: _____

Street: _____ City: _____ State: _____ Zip: _____

AREAS SQUARE FOOTAGE: Living: _____ Garage: _____ Covered Patios/ Porches: _____ Enclosed Storage: _____

Carpport: _____ Total under Roof _____ Elevated Deck: _____ Enclosed area below BFE*: _____
* Enclosed non-habitable areas below the Base Flood Elevation greater than 300 sq. ft. require a Non-Conversion Covenant Agreement.

CODE EDITIONS IN EFFECT THIS APPLICATION: Florida Building Code (Structural, Mechanical, Electrical, Plumbing, Existing, Gas) 2007
National Electrical Code: 2005(2008 after 6/1/09) Florida Energy Code: 2007, Florida Accessibility Code: 2007, Florida Fire Prevention Code 2007



NOTICES TO OWNERS AND CONTRACTORS:

1. YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. WHEN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.
2. THERE ARE SOME PROPERTIES THAT MAY HAVE DEED RESTRICTIONS RECORDED UPON THEM. THESE RESTRICTIONS MAY LIMIT OR PROHIBIT THE WORK APPLIED FOR IN YOUR BUILDING PERMIT. IT IS YOUR RESPONSIBILITY TO DETERMINE IF YOUR PROPERTY IS ENCUMBERED BY ANY RESTRICTIONS. SOME RESTRICTIONS APPLICABLE TO THIS PROPERTY MAY BE FOUND IN THE PUBLIC RECORDS OF MARTIN COUNTY OR THE TOWN OF SEWALL'S POINT, THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.
3. BUILDING PERMITS FOR SINGLE FAMILY RESIDENCES AND SUBSTANTIAL IMPROVEMENTS TO SINGLE FAMILY RESIDENCES ARE VALID FOR A PERIOD OF 24 MONTHS. RENEWAL FEES WILL BE ASSESSED AFTER 24 MONTHS PER TOWN ORDINANCE 50-95.
4. THIS PERMIT WILL BECOME NULL AND VOID IF THE WORK AUTHORIZED BY THIS PERMIT IS NOT COMMENCED WITHIN 180 DAYS, OR IF WORK IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AT ANY TIME AFTER THE WORK IS COMMENCED. ADDITIONAL FEES WILL BE ASSESSED ON ANY PERMIT THAT BECOMES NULL AND VOID. REF. FBC 2004 W/ 2006 REVISIONS SECT. 105.4.1, 105.4.1.1 - .5.

*******A FINAL INSPECTION IS REQUIRED ON ALL BUILDING PERMITS*******

APPLICATION IS HEREBY MADE TO OBTAIN A PERMIT TO DO THE WORK AND INSTALLATIONS AS SPECIFICALLY INDICATED ABOVE. I CERTIFY THAT NO WORK OR INSTALLATION HAS COMMENCED PRIOR TO THE ISSUANCE OF A PERMIT AND THAT THE INFORMATION I HAVE FURNISHED ON THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I AGREE TO COMPLY WITH ALL APPLICABLE CODES, LAWS, AND ORDINANCES OF THE TOWN OF SEWALL'S POINT DURING THE BUILDING PROCESS.

OWNER SIGNATURE: (required)
OR OWNER'S LEGAL AUTHORIZED AGENT (PROOF REQUIRED)
Catherine Sellan
State of Florida, County of: SAINT LUCIE
This the 1 day of MAY, 2010
by CATHERINE SELLAN who is personally

CONTRACTOR SIGNATURE: (required)
Jeffery Hardin
On State of Florida County of: SAINT LUCIE
This the 1 day of MAY, 2010
by JEFFERY HARDIN who is personally

known to me or produced as identification. BRENT T STOLTENBERG
MY COMMISSION # DD804466
Notary Public EXPIRES July 08, 2012
My Commission Expires: 5/1/10 (407) 398-0153 FloridaNotaryService.com

known to me or produced as identification. BRENT T STOLTENBERG
MY COMMISSION # DD804466
EXPIRES July 08, 2012
Notary Public
My Commission Expires: 5/1/10 (407) 398-0153 FloridaNotaryService.com

SINGLE FAMILY PERMIT APPLICATIONS MUST BE ISSUED WITHIN 30 DAYS OF APPROVAL NOTIFICATION (FBC 105.3.4) ALL OTHER APPLICATIONS WILL BE CONSIDERED ABANDONED AFTER 180 DAYS (FBC 105.3.2) - PLEASE PICK UP YOUR PERMIT PROMPTLY!



Martin County, Florida

Laurel Kelly, C.F.A

Site Provided by...
governmax.com T1.12

Summary

print [navigation icons] Owner 1 of 6

Parcel Info

Parcel ID	Unit Address	Serial Index ID	Order	Commercial	Residential
13-38-41-011-000-00120-9	162 S RIVER RD	27873	Owner	0	1

Summary

- Land
- Residential
- Improvement
- Commercial
- Image
- Sales & Transfers
- Assessments →
- Taxes →
- Exemptions →
- Parcel Map →
- Full Legal →

Summary

Property Location 162 S RIVER RD
Tax District 2200 Sewall's Point
Account # 27873
Land Use 101 0100 Single Family
Neighborhood 120200
Acres 0.390

Legal Description
Property Information
 MARGUERITA S/D LOT 12

Search By

- Parcel ID
- Owner**
- Address
- Account #
- Use Code
- Legal Description
- Neighborhood
- Sales
- Map →

Owner Information
Owner Information
 SELLIAN, CAHTERINE A

Mail Information
 162 SOUTH RIVER RD
 STUART FL 34996

Assessment Info
 Front Ft. 0.00

Market Land Value \$157,700
Market Impr Value \$179,050
Market Total Value \$336,750

Site Functions

- Property Search**
- Contact Us
- On-Line Help
- County Home
- Site Home
- County Login

Recent Sale
Sale Amount \$525,000

Sale Date 8/20/2003
Book/Page 1808 0024

Print | Back to List | << First < Previous Next > Last >>

Legal disclaimer / Privacy Statement

Data updated on 4/29/2010



TOWN OF SEWALL'S POINT
BUILDING DEPARTMENT
FILE COPY

HOWE

EXISTING WOODEN
DECK

GRASS AREA TO REMAIN

EXISTING STAIRS

23'

SELLMAN
192.5 RIVER RD.
SEWALL'S POINT, FL

A

- NEW FLAGSTONE PATIO.
- STONE TO BE INSTALLED ON 4" COMPACTED WASHED SAND (OR EQUIVALENT).
- NEW PATIO TO BE MADE LEVEL, GRADE WILL BE BROUGHT TO IT; APPROXIMATELY 4".

1/1/19
[Signature]

TOWN OF SEWALLS POINT

BUILDING DEPARTMENT - INSPECTION LOG

Date of Inspection Mon Tue Wed Thur Fri 6-2-10 Page 1 of 2

PERMIT #	OWNER/ADDRESS/CONTRACTOR	INSPECTION TYPE	RESULTS	COMMENTS
9447	Kruitt	AC Final		
1st	7 Island Rd Krauss & Crane		Pass	Close INSPECTOR <i>JA</i>
9426	Boniface 63 Skiver Rd Code Red Roof	in-progress	Pass	INSPECTOR <i>JA</i>
9397	8 Nadden 160 Skiver Station	final deck	Pass	Close INSPECTOR <i>JA</i>
9425	1125 112 Skiver Station	Final deck	Pass	Close INSPECTOR <i>JA</i>
9459	Seemann 22 S. Sewalls McCool	Final AC	Pass	Close INSPECTOR <i>JA</i>
9419	Beckett 10 W. Redwood Cable	AC		INSPECTOR
9387	Jaley Holding 113 Hillcrest Sengate	gas final (w/air thru)	Pass	INSPECTOR <i>JA</i>

TOWN OF SEWALL'S POINT, FLORIDA

Date 7/28 ~~2003~~ TREE REMOVAL PERMIT N^o 2062

APPLIED FOR BY HINES (Contractor or Owner)

Owner 162 S. RIVER ROAD

Sub-division Sewall's Meadow, Lot 3, Block _____

Kind of Trees tree uprooted during storm

No. Of Trees: REMOVE 1 OAK

No. Of Trees: RELOCATE _____ WITHIN 30 DAYS (NO FEE)

No. Of Trees: REPLACE _____ WITHIN 30 DAYS

REMARKS _____

_____ FEE \$ 0

Signed, _____ Applicant Signed, Gene Simmons (RS) Town Clerk

TOWN OF SEWALL'S POINT

Call 287-2455 - 8:00 A.M.-12:00 Noon for Inspection
WORK HOURS 8:00 A.M. - 5:00 P.M. - NO SUNDAY WORK.

TREE REMOVAL PERMIT

RE: ORDINANCE 103

Lined area for drawing or additional information.

PROJECT DESCRIPTION _____

Lined area for project description.

REMARKS _____

Lined area for remarks.

**TOWN OF SEWALL'S POINT
APPLICATION FOR TREE REMOVAL, RELOCATION, REPLACEMENT**

Tree Defined: Any self-supporting, woody plant which normally grows to an overall height of at least fifteen (15) feet in the vicinity of the town. Replant and landscape trees shall be considered a tree.

No permit required for:

1. Trimming of trees unless it effectively removes it, meaning trimming or pruning to the extent that a plant's natural function is severely altered.
2. Trees with a diameter of less than one inch.

Permit Fee:

1. Tree permits are \$15.00, payable in advance.
2. No permit fee needed for tree which is dead, diseased, injured, hazardous to life or property, or a prohibited species. Prohibitive species include Earleaf Acacia, Woman's Tongue, Norfolk Island Pine, Bischofia, Schefflera, Ear Tree, Eucalyptus, Non-Native Ficus, Silk Oak, Chinese Tallow Tree, Java Plum, Chinaberry, Brazilian Peppers, Australian Pine, and Melaleuca and must be removed before construction begins on new single family residence (S.F.R.).

No removal permits will be issued for native species trees: Black Ironwood, Black Mangrove, Blolly, Buttonwood, Cabbage Palm, Cocoplum (red tip and green tip), Coral Bean, Deer Moss, Gray Twig, Gopher Apple, Gumbo Limbo, Inkwood, Laurel Oak, Leather Fern, Live Oak, Mahogany, Marlberry, Mastic, Mulberry, Myrtle Oak, Paradise Tree, Pigeon Plum, Pond Apple, Prickly Pear, Red Mangrove, Red Maple, Red bay, Saffron Plum, Sand Pine, Scrub Pine, Satinleaf, Saw Palmetto, Scrub Hickory, Sea Grape, Sea Oxeye, Slash Pine, Stoppers, Wild Lime, Sumac (southern), Sugar Berry (Hackberry), Torchwood, Wild Coffee, Varnish Leaf, Water Oak, Wax Myrtle, West Indian Cherry White Mangrove

Application procedures:

1. Fill out application information below to include:
 - a. applicant information
 - b. written statement giving reasons for removal, relocation, or replacement if necessary
 - c. for a new S.F.R., a site plan which shall include the dimensional location on a survey, scale drawing or aerial photograph, superimposed with lot lines of scale, of all existing or proposed structures, improvements and site uses, location of affected trees identified with an estimated size and number, etc.
 - d. for an existing residence, a drawing of house with location of trees to be removed, relocated can be submitted in lieu of site plan.
2. Place identification tape or ribbon on each tree for clarity to inspector if necessary.
3. Inspector will visit site and review application and pass, fail or revise.
4. Permit must be picked up and on site prior to work proceeding.
5. Permits expire if work does not begin within 3 months and if activity is interrupted over 45 days.

Owner PAUL HINES **Address** LOT 3 162 S. RIVER Rd **Phone** 286-2513 (h) 223-2204 (w)

Contractor _____ **Address** _____ **Phone** _____

No. of Trees: REMOVE 1 **Type:** OAK

No. of Trees: RELOCATE _____ **WITHIN 30 DAYS** **Type:** _____

No. of Trees: REPLACE _____ **WITHIN 30 DAYS** **Type:** _____

Written statement giving reasons: TREE UPROOTED DURING STORM (LOT 3, SEWALLS MEADOW) VACANT

Signature of Applicant Paul K. Hines **Date** 7/25/03

Approved by Building Inspector: [Signature] **Date** 7/28/03 **Fee:** -0-

Plans approved as submitted [Signature] **Plans approved as revised/marked:** STORM DAMAGE

TOWN OF SEWALL'S POINT

Building Department - Inspection Log

Date of Inspection: Mon Wed Fri 7-28, 200³₂ Page 1 of

PERMIT	OWNER/ADDRESS/CONTR.	INSPECTION TYPE	RESULTS	NOTES/COMMENTS:
6346	Moore	pool	CXL	
	5 Oak Hill Way	main drain	7:49msg	
		steel & bond		INSPECTOR:
6252	GREEN * 26 ISLAND ROAD WILFRAM CONST.	REROOF - MTG w/ RFG CONSULTANT LES KNOPE SA-582-7100	Passed 561 2483729	TENTATIVE APPT: 10:30 PLEASE COMPLY WITH ARCHITECT: JON OLSON INSPECTOR: <i>[Signature]</i> 720-9909
T/R	Hinos 162 S. Rive Rd.	Tree	Passed	INSPECTOR: <i>[Signature]</i>
5745	Plymale 24 Field way O/D	FT Demo	Passed	close INSPECTOR: <i>[Signature]</i>
PERMIT	OWNER/ADDRESS/CONTR.	INSPECTION TYPE	RESULTS	NOTES/COMMENTS:
				INSPECTOR:
PERMIT	OWNER/ADDRESS/CONTR.	INSPECTION TYPE	RESULTS	NOTES/COMMENTS:
				INSPECTOR:
PERMIT	OWNER/ADDRESS/CONTR.	INSPECTION TYPE	RESULTS	NOTES/COMMENTS:
				INSPECTOR:

OTHER:

* Dry in in progress
gables and flat areas