

HISTORIC AND DESIGN REVIEW COMMISSION

August 04, 2021

HDRC CASE NO: 2021-352
ADDRESS: 911 BURLESON ST
LEGAL DESCRIPTION: NCB 1302 BLK 3 LOT E 41 FT OF 13
ZONING: R-5, H
CITY COUNCIL DIST.: 2
DISTRICT: Dignowity Hill Historic District
APPLICANT: Lonnie Sanchez
OWNER: VILLARREAL ANTONIO M
TYPE OF WORK: Exterior modifications, fenestration modifications, window removal and replacement, construction of a rear addition, siding replacement, door replacement
APPLICATION RECEIVED: July 15, 2021
60-DAY REVIEW: Not applicable due to City Council Emergency Orders
CASE MANAGER: Edward Hall

REQUEST:

The applicant is requesting a Certificate of Appropriateness for approval to:

1. Replace all existing, wood siding.
2. Replace all existing windows with new wood windows.
3. Perform exterior and fenestration modifications including the conversion of two window openings under the front gable to one, the removal of one window under the west facing side roof gable and the removal of one window on the east façade.
4. Remove the street facing front door.
5. Install a new front door (side facing door opening).
6. Install a new shingle roof.
7. Construct a rear addition.

APPLICABLE CITATIONS:

Historic Design Guidelines, Chapter 2, Guidelines for Exterior Maintenance and Alterations

A. MAINTENANCE (PRESERVATION)

- i. Openings*—Preserve existing window and door openings. Avoid enlarging or diminishing to fit stock sizes or air conditioning units. Avoid filling in historic door or window openings. Avoid creating new primary entrances or window openings on the primary façade or where visible from the public right-of-way.
- ii. Doors*—Preserve historic doors including hardware, fanlights, sidelights, pilasters, and entablatures.
- iii. Windows*—Preserve historic windows. When glass is broken, the color and clarity of replacement glass should match the original historic glass.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

- i. Doors*—Replace doors, hardware, fanlight, sidelights, pilasters, and entablatures in-kind when possible and when deteriorated beyond repair. When in-kind replacement is not feasible, ensure features match the size, material, and profile of the historic element.
- ii. New entrances*—Ensure that new entrances, when necessary to comply with other regulations, are compatible in size, scale, shape, proportion, material, and massing with historic entrances.
- iii. Glazed area*—Avoid installing interior floors or suspended ceilings that block the glazed area of historic windows.
- iv. Window design*—Install new windows to match the historic or existing windows in terms of size, type, configuration, material, form, appearance, and detail when original windows are deteriorated beyond repair.
- v. Muntins*—Use the exterior muntin pattern, profile, and size appropriate for the historic building when replacement windows are necessary. Do not use internal muntins sandwiched between layers of glass.

Standard Specifications for Windows in Additions and New Construction

Consistent with the Historic Design Guidelines, the following recommendations are made for windows to be used in new construction:

- **GENERAL:** Windows used in new construction should be similar in appearance to those commonly found within the district in terms of size, profile, and configuration. While no material is expressly prohibited by the Historic Design Guidelines, a high quality wood or aluminum-clad wood window product often meets the Guidelines with the stipulations listed below.
- **SIZE:** Windows should feature traditional dimensions and proportions as found within the district.
- **SASH:** Meeting rails must be no taller than 1.25". Stiles must be no wider than 2.25". Top and bottom sashes must be equal in size unless otherwise approved.
- **DEPTH:** There should be a minimum of 2" in depth between the front face of the window trim and the front face of the top window sash. This must be accomplished by recessing the window sufficiently within the opening or with the installation of additional window trim to add thickness. All windows should be supplied in a block frame and exclude nailing fins which limit the ability to sufficiently recess the windows.
- **TRIM:** Window trim must feature traditional dimensions and architecturally appropriate casing and sloped sill detail.
- **GLAZING:** Windows should feature clear glass. Low-e or reflective coatings are not recommended for replacements. The glazing should not feature faux divided lights with an interior grille. If approved to match a historic window configuration, the window should feature true, exterior muntins.
- **COLOR:** Wood windows should feature a painted finish. If a clad or non-wood product is approved, white or metallic manufacturer's color is not allowed and color selection must be presented to staff.

Historic Design Guidelines, Chapter 3, Guidelines for Additions

1. Massing and Form of Residential Additions

A. GENERAL

- i. Minimize visual impact—Site residential additions at the side or rear of the building whenever possible to minimize views of the addition from the public right-of-way. An addition to the front of a building would be inappropriate.
- ii. Historic context—Design new residential additions to be in keeping with the existing, historic context of the block. For example, a large, two-story addition on a block comprised of single-story homes would not be appropriate.
- iii. Similar roof form—Utilize a similar roof pitch, form, overhang, and orientation as the historic structure for additions.
- iv. Transitions between old and new—Utilize a setback or recessed area and a small change in detailing at the seam of the historic structure and new addition to provide a clear visual distinction between old and new building forms.

B. SCALE, MASSING, AND FORM

- i. Subordinate to principal facade—Design residential additions, including porches and balconies, to be subordinate to the principal facade of the original structure in terms of their scale and mass.
- ii. Rooftop additions—Limit rooftop additions to rear facades to preserve the historic scale and form of the building from the street level and minimize visibility from the public right-of-way. Full-floor second story additions that obscure the form of the original structure are not appropriate.
- iii. Dormers—Ensure dormers are compatible in size, scale, proportion, placement, and detail with the style of the house. Locate dormers only on non-primary facades (those not facing the public right-of-way) if not historically found within the district.
- iv. Footprint—The building footprint should respond to the size of the lot. An appropriate yard to building ratio should be maintained for consistency within historic districts. Residential additions should not be so large as to double the existing building footprint, regardless of lot size.
- v. Height—Generally, the height of new additions should be consistent with the height of the existing structure. The maximum height of new additions should be determined by examining the line-of-sight or visibility from the street. Addition height should never be so contrasting as to overwhelm or distract from the existing structure.

3. Materials and Textures

A. COMPLEMENTARY MATERIALS

- i. Complementary materials—Use materials that match in type, color, and texture and include an offset or reveal to distinguish the addition from the historic structure whenever possible. Any new materials introduced to the site as a result of an addition must be compatible with the architectural style and materials of the original structure.
- ii. Metal roofs—Construct new metal roofs in a similar fashion as historic metal roofs. Refer to the Guidelines for Alternations and Maintenance section for additional specifications regarding metal roofs.
- iii. Other roofing materials—Match original roofs in terms of form and materials. For example, when adding on to a building with a clay tile roof, the addition should have a roof that is clay tile, synthetic clay tile, or a material that appears similar in color and dimension to the existing clay tile.

B. INAPPROPRIATE MATERIALS

- i. Imitation or synthetic materials—Do not use imitation or synthetic materials, such as vinyl siding, brick or simulated stone veneer, plastic, or other materials not compatible with the architectural style and materials of the original structure.

C. REUSE OF HISTORIC MATERIALS

- i. Salvage—Salvage and reuse historic materials, where possible, that will be covered or removed as a result of an addition.

4. Architectural Details

A. GENERAL

- i. Historic context—Design additions to reflect their time while respecting the historic context. Consider character-defining features and details of the original structure in the design of additions. These architectural details include roof form, porches, porticos, cornices, lintels, arches, quoins, chimneys, projecting bays, and the shapes of window and door openings.
- ii. Architectural details—Incorporate architectural details that are in keeping with the architectural style of the original structure. Details should be simple in design and compliment the character of the original structure. Architectural details that are more ornate or elaborate than those found on the original structure should not be used to avoid drawing undue attention to the addition.
- iii. Contemporary interpretations—Consider integrating contemporary interpretations of traditional designs and details for additions. Use of contemporary window moldings and door surroundings, for example, can provide visual interest while helping to convey the fact that the addition is new.

Historic Design Guidelines, Chapter 5, Guidelines for Site Elements

B. NEW FENCES AND WALLS

- i. *Design*—New fences and walls should appear similar to those used historically within the district in terms of their scale, transparency, and character. Design of fence should respond to the design and materials of the house or main structure.
- ii. *Location*—Avoid installing a fence or wall in a location where one did not historically exist, particularly within the front yard. The appropriateness of a front yard fence or wall is dependent on conditions within a specific historic district.
New front yard fences or wall should not be introduced within historic districts that have not historically had them.
- iii. *Height*—Limit the height of new fences and walls within the front yard to a maximum of four feet. The appropriateness of a front yard fence is dependent on conditions within a specific historic district. New front yard fences should not be introduced within historic districts that have not historically had them. If a taller fence or wall existed historically, additional height may be considered. The height of a new retaining wall should not exceed the height of the slope it retains.
- iv. *Prohibited materials*—Do not use exposed concrete masonry units (CMU), Keystone or similar interlocking retaining

wall systems, concrete block, vinyl fencing, or chain link fencing.

v. *Appropriate materials*—Construct new fences or walls of materials similar to fence materials historically used in the district. Select materials that are similar in scale, texture, color, and form as those historically used in the district, and that are compatible with the main structure. Screening incompatible uses—Review alternative fence heights and materials for appropriateness where residential properties are adjacent to commercial or other potentially incompatible uses.

FINDINGS:

- a. The historic structure at 911 Burleson was constructed circa 1910 and first appears on the 1912 Sanborn Map. The structure was constructed in the Folk Victorian style, features a traditional L-plan and both front and side gabled roofs. The structure has featured numerous modifications since its construction, including window replacement and porch modifications, and recently, the removal of the original siding.
- b. VIOLATION – Office of Historic Preservation staff performed a site visit and posted a Stop Work Order on February 4, 2021, for siding removal, window removal, fenestration and exterior modifications, the construction of a rear addition, and the start of the installation of site fencing.
- c. SIDING – The applicant has proposed to replace the original wood siding with 117 profile siding. The original wood siding featured a Dutch lap siding profile. Per the Guidelines for Exterior Maintenance and Alterations 1.B.i. materials that are in good condition should not be removed and should be repaired in place. Staff finds the replacement of the original siding to be neither consistent with the Guidelines not appropriate. Staff finds that siding feature a profile that is consistent with the original should be installed.
- d. WINDOW REPLACEMENT – The applicant has proposed to replace the existing windows with new wood windows. Staff does not have information regarding the majority of the previous windows on site. Staff does have photos of three, street facing windows, which were aluminum windows, not original to the structure. Generally, staff finds the replacement of non-original windows with wood windows to be appropriate, provided that the replacement windows are consistent with staff's standards for windows. The applicant has identified a window product that is generally consistent with staff's standards (Jeldwen W2500).
- e. FENESTRATION MODIFICATIONS – The applicant has proposed exterior and fenestration modifications including the conversion of two window openings under the front gable to one, the removal of one window under the west facing side roof gable and the removal of one window on the east façade. The Guidelines for Exterior Maintenance and Alterations 6.A.i. notes that existing window and door openings should be preserved. Staff finds the modifications to these windows to be inappropriate and inconsistent with the Guidelines.
- f. DOOR REMOVAL – The historic structure currently features two front doors, one facing the street and one facing the side yard, a profile that is found throughout the Dignowity Hill Historic District. The applicant has proposed to eliminate the street facing front door. The Guidelines for Exterior Maintenance and Alterations 6.A.i. notes that existing window and door openings should be preserved. Staff finds the removal of the street facing front door to be inappropriate and inconsistent with the Guidelines.
- g. FRONT DOOR (Door replacement) – The applicant has proposed to install a front door that features Craftsman details. Staff finds the installation of a Craftsman style door on a Folk Victorian house to be inappropriate and inconsistent with the Guidelines.
- h. ROOF REPLACEMENT – The applicant has proposed to replace the existing, shingle roof with a new shingle roof. Staff finds this to be appropriate; however, the historic structure's roof forms shall not be modified. This is to include all gabled forms, the porch roof's hipped form and all architectural detailing.
- i. REAR ADDITION – The applicant has proposed to construct a rear addition in place of the existing rear addition, at the rear of the existing side wing and to the side of the existing rear wing of the structure. The existing rear addition, was not found on the 1952 Sanborn Map. The construction of the proposed rear addition would result in the elimination of a rear porch.
- j. REAR ADDITION – The applicant has proposed to construct a rear addition. The Guidelines for Additions 1.A. notes that additions should be sited to minimize view from the public right of way, should be designed to be in keeping with the existing, historic context of the block, should feature similar roof forms, and should feature a transition to differentiate the new addition from the historic structure. Additionally, the Guidelines for Additions 1.B notes that additions should be subordinate o the principal façade of the historic structure, should feature a footprint that responds to the size of the lot, and should feature an overall height that is generally consistent with that of the historic structure. Generally, staff finds the proposed addition's height, massing and roof form to be

appropriate; however, staff finds that the addition should feature an inset from the wall plane of the historic structure on the west elevation.

- k. REAR ADDITION (Materials) – The applicant has proposed materials that include 117 profile wood siding, wood windows and an asphalt shingle roof. Staff finds that siding should be installed that is matching in exposure to that of the original siding that was removed from the historic structure. Generally, staff finds the proposed roofing and windows (Jeldwen W2500) to be appropriate.
- l. REAR ADDITION (Architectural Details) – The Guidelines for Additions 4.A. notes that additions should be designed to reflect their time while respecting the historic context of the historic structure and should incorporate architectural details that are consistent with those of the original structure. Generally, staff finds that the addition should feature an inset from the historic structure’s wall plane on the west elevation and that siding should feature an exposure that is consistent with that of the primary structure’s original siding. Profile 117 siding should not be installed on the addition unless the Commission approved its installation on the primary historic structure.
- m. FENCING – The installation of fencing on site began prior to the issuance of a Certificate of Appropriateness. At this time, the applicant has not requested approval of fencing. Privacy fencing, if installed behind the front façade of the historic structure featuring wood pickets and no more than six (6) feet in height is eligible for administrative approval. Any front yard fencing will require a COA from the Commission.

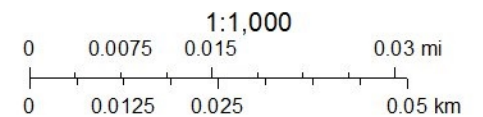
RECOMMENDATION:

- 1. Staff does not recommend approval of item #1, the replacement of all original wood siding, based on finding c. Since all original siding has been removed and discarded, staff recommends that siding that features a matching profile be installed.
- 2. Staff recommends approval of item #2, the replacement of existing aluminum windows with wood windows, based on finding d with the stipulation that the proposed windows adhere to staff’s standards for windows.
- 3. Staff does not recommend approval of item #3, modifications to existing fenestration, based on finding e. Staff recommends that all existing window openings be maintained as they originally existed, based on photographic evidence.
- 4. Staff does not recommend approval of item #4, front door removal, based on finding f. Staff recommends that both front door openings remain as they originally existed based on photographic evidence.
- 5. Staff does not recommend approval of item #5, the installation of a Craftsman style door, based on finding g. Staff recommends that a door styled appropriately for the Folk Victorian style be installed. The door shall be wood and shall be reviewed and approved by OHP staff prior to installation.
- 6. Staff recommends approval of item #6, roof replacement, based on finding h. The historic structure’s roof forms shall not be modified. This is to include all gabled forms, the porch roof’s hipped form and all architectural detailing.
- 7. Staff recommends approval of item #7, the construction of a rear addition based on findings i through l with the following stipulations:
 - i. That the siding on the rear addition feature an exposure and profile that matches that which is installed on the historic structure, if wood. If composite siding is installed, it should feature a four (4) inch profile and a smooth finish. Profile 117 siding should not be installed on the rear addition unless approved on the primary historic structure by the Commission.
 - ii. That the height of the proposed shed roof portion of the rear addition be limited to what is shown on the north elevation and that the east and west elevation drawings be updated to reflect a lower profiled shed roof that matches the north elevation.
 - iii. That the addition feature a transition piece at the connection with the primary historic structure.
 - iv. That the addition’s windows match those installed in the primary historic structure; wood that is consistent with staff’s standards for windows.

City of San Antonio One Stop



July 29, 2021





Street View - Mar 2019



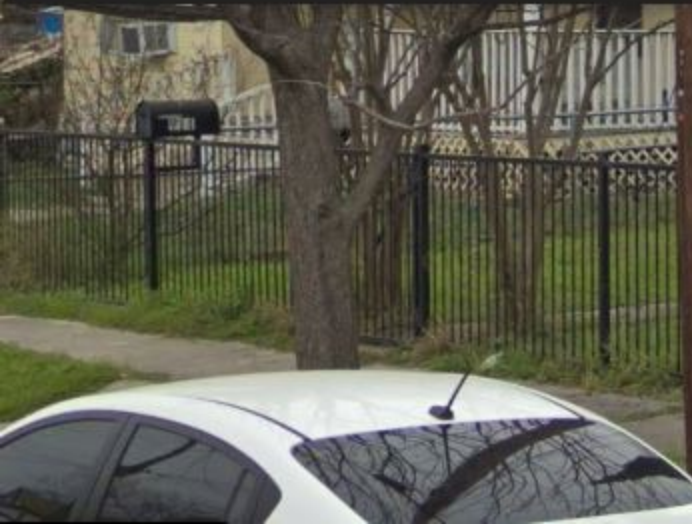
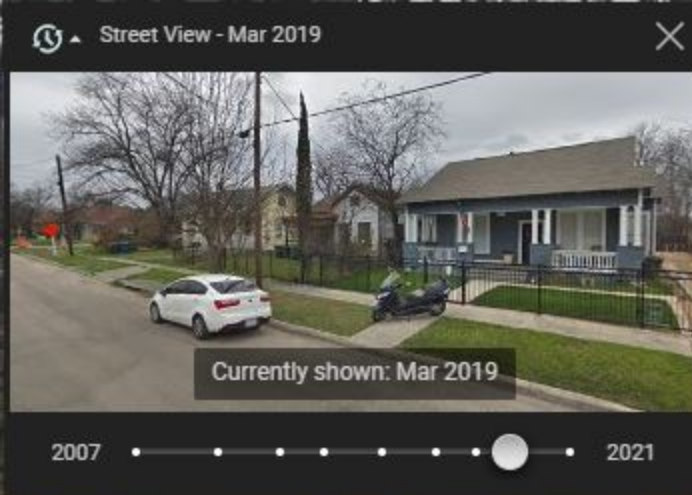
Currently shown: Mar 2019

2007



2021







Investigation Report

Property

Address	911 Burleson
District/Overlay	Dignowity Hill
Owner Information	Antonio Villarreal

Site Visit

Date	02/04/2021
Time	11:26 AM (-6 GMT)
Context	drive-by
Present Staff	Huy Pham, Edward Hall
Present Individuals	None
Types of Work Observed	Exterior Maintenance and Alterations, Additions, Site Elements
Amount of Work Completed	50%
Description of work	Siding removal, window removal, addition, initiation of fencing.

Action Taken

Violation Type	No Certificate of Appropriateness (Code 35-451a)
OHP Action	Posted "Notice of Investigation", Posted additional "Stop Work Notice"
Will post-work application fee apply?	Yes

Documentation

Photographs	<p>February 4, 2021 at 11:24 AM 911 Burleson San Antonio TX 78202 United States</p> 
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Investigation Report



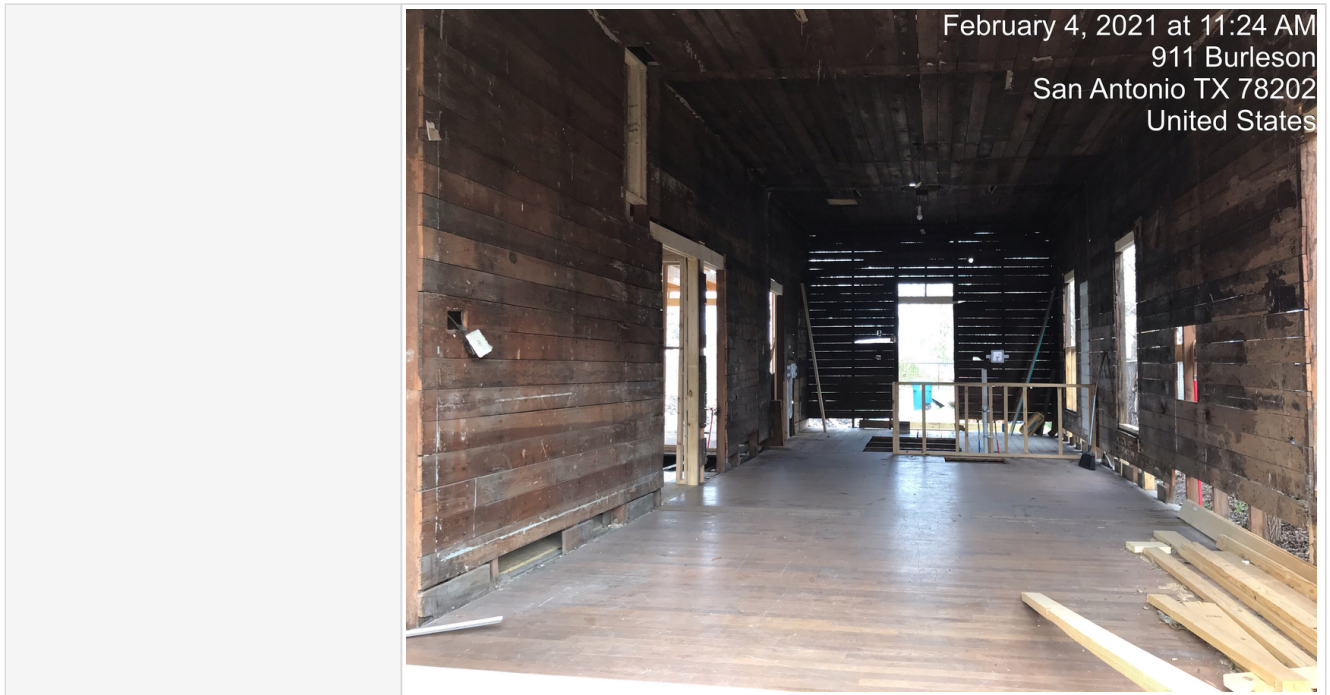


Investigation Report





Investigation Report





911

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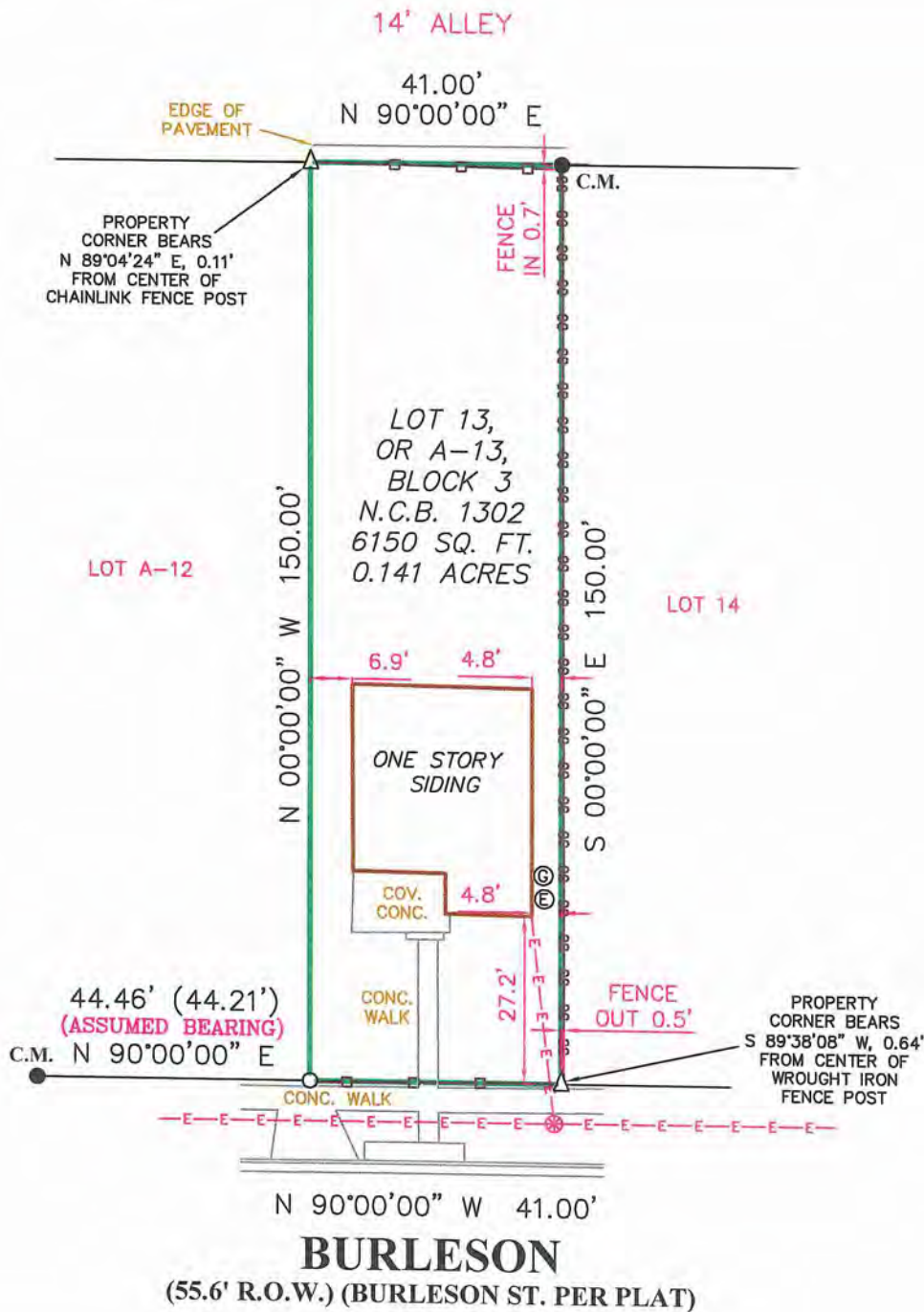








NOTE:
NO RESTRICTIVE COVENANTS OF RECORD WERE FOUND.



SCALE: 1"=30'

NOTE:
BACK OF CURB WAS UTILIZED FOR ORIENTATION AND
CONTROLLING MONUMENT.

NOTE:
THE SIGNING SURVEYOR WAS NOT PROVIDED A CURRENT
TITLE COMMITMENT AND THERE MAY BE EASEMENTS,
RIGHTS OF WAY OR OTHER INSTRUMENTS OF RECORD
WHICH MAY AFFECT THIS PROPERTY WHICH ARE NOT
SHOWN ON THE FACE OF THIS SURVEY.

NOTE:
BEARINGS SHOWN HEREON ARE ASSUMED.

THIS SURVEY IS
ACKNOWLEDGED AND
IS ACCEPTED:

FLOOD ZONE INTERPRETATION: IT IS THE RESPONSIBILITY OF ANY INTERESTED PERSONS TO VERIFY THE ACCURACY OF FEMA FLOOD ZONE DESIGNATION OF THIS PROPERTY WITH FEMA AND STATE AND LOCAL OFFICIALS, AND TO DETERMINE THE EFFECT THAT SUCH DESIGNATION MAY HAVE REGARDING THE INTENDED USE OF THE PROPERTY. The property made the subject of this survey appears to be included in a FEMA Flood Insurance Rate Map (FIRM), identified as Community No. 48029C, Panel No. 0415 G, which is Dated 09-29-2010. By scaling from that FIRM, it appears that all or a portion of the property may be in Flood Zone(s) X. Because this is a boundary survey, the survey did not take any actions to determine the Flood Zone status of the surveyed property other than to interpret the information set out on FEMA's FIRM, as described above. THIS SURVEYOR DOES NOT CERTIFY THE ACCURACY OF THIS INTERPRETATION OF THE FLOOD ZONES, which may not agree with the interpretations of FEMA or state or local officials, and which may not agree with the tract's actual conditions. More information concerning FEMA's Special Flood Hazard Areas and Zones may be found at <https://msc.fema.gov/portal>.



Property Address:
911 BURLESON (BURLESON ST. PER PLAT)

Property Description:
BEING THE EAST 41 FEET OF LOT 13, SAME BEING KNOWN
AS A-13, BLOCK THREE (3), NEW CITY BLOCK 1302, CITY
OF SAN ANTONIO, BEXAR COUNTY, TEXAS, ACCORDING TO
THE MAP OR PLAT THEREOF FOUND IN THE CITY OF SAN
ANTONIO MUNICIPAL ARCHIVES.

Owner:
TBD

I, MARK J. EWALD, Registered Professional
Land Surveyor, State of Texas, do hereby
certify that the above plat represents an
actual survey made on the ground under my
supervision, and there are no discrepancies,
conflicts, shortages in area or boundary
lines, or any encroachment or overlapping of
improvements, to the best of my knowledge
and belief, except as shown herein.

Mark J. Ewald

MARK J. EWALD
Registered Professional Land Surveyor
Texas Registration No. 5095

FIRM REGISTRATION NO.
10111700

**Westar
Alamo**

LAND SURVEYORS, LLC.

P.O. BOX 1645 BOERNE, TEXAS 78006
PHONE (210) 372-9500 FAX (210) 372-9999

LEGEND

- △ = CALCULATED POINT
- = FND 1/2" IRON ROD
- () = RECORD INFORMATION
- B.S. = BUILDING SETBACK
- C.M. = CONTROLLING MONUMENT
- ⊙ = POWER POLE
- ⊕ = ELECTRIC METER
- ⊗ = GAS METER
- E— = OVERHEAD ELECTRIC
- = SET 1/2" IRON ROD CAPPED "WALS"

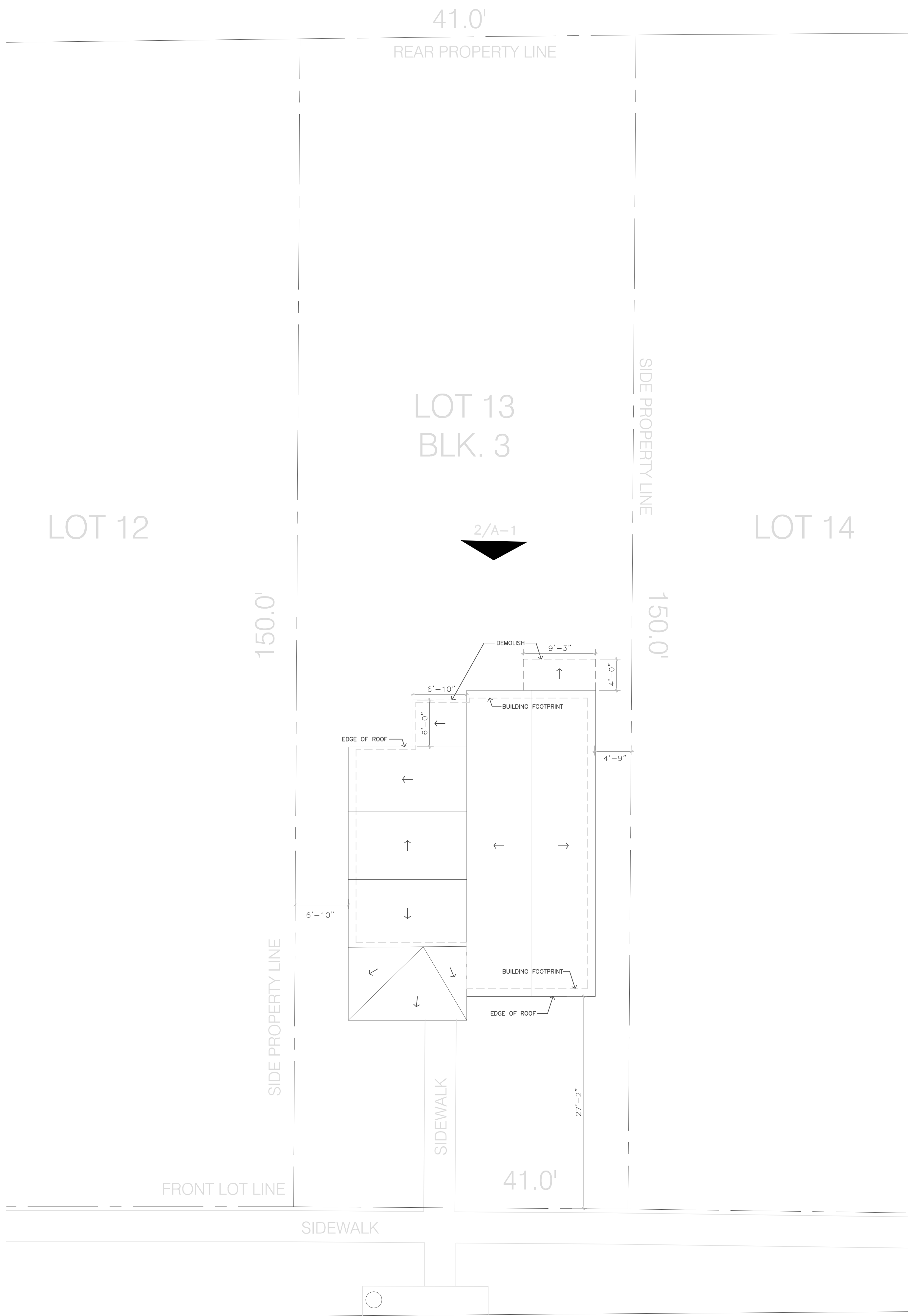


DWG: JW RVD: RBA

G.F. NO. N/A

JOB NO. 104222 TITLE COMPANY: N/A

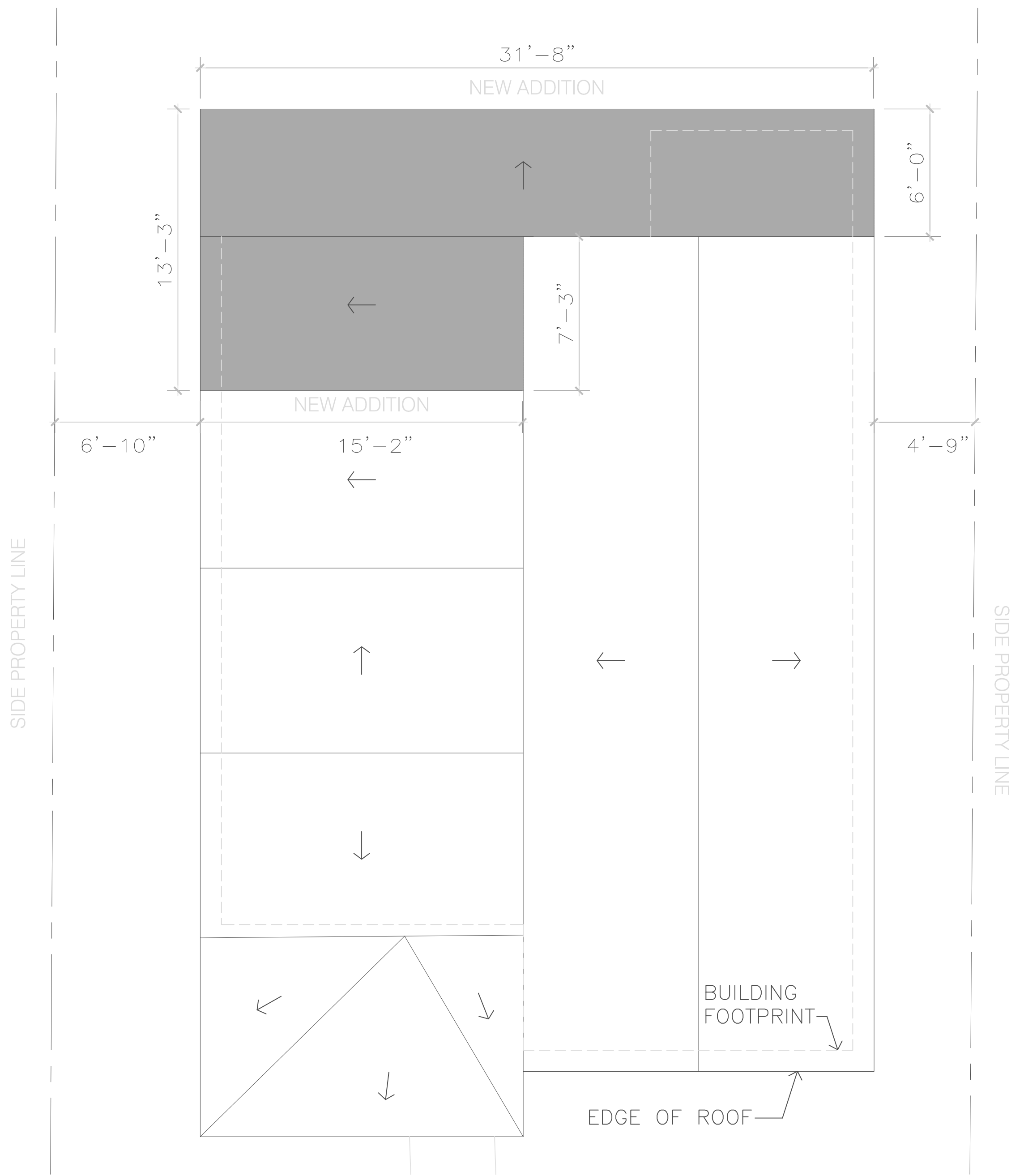
DATE: 02-22-2021



① SITE PLAN — EXISTING
SCALE: 1/8"=1'-0"



② SITE IMAGE — EXISTING
SCALE: NO SCALE



③ ROOF PLAN — NEW WORK
SCALE: 1/4"=1'-0"

VILLAREAL RESIDENCE
911 BURLESON
SAN ANTONIO, TX 78202

PREPARED ON BEHALF OF
LONNIE SANCHEZ
(210) 385-7264

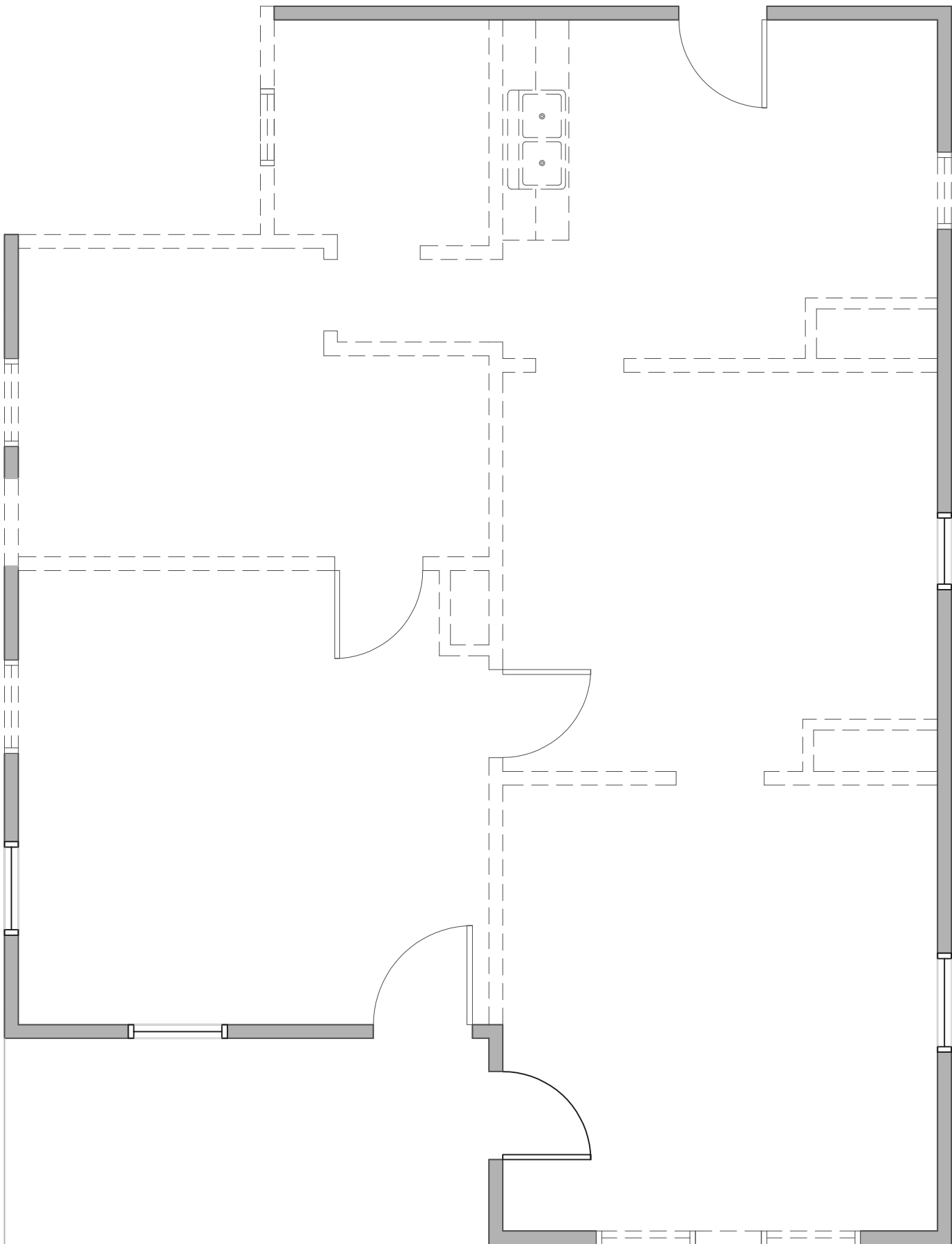
MAY 03, 2021

SITE / ROOF PLAN

A-1

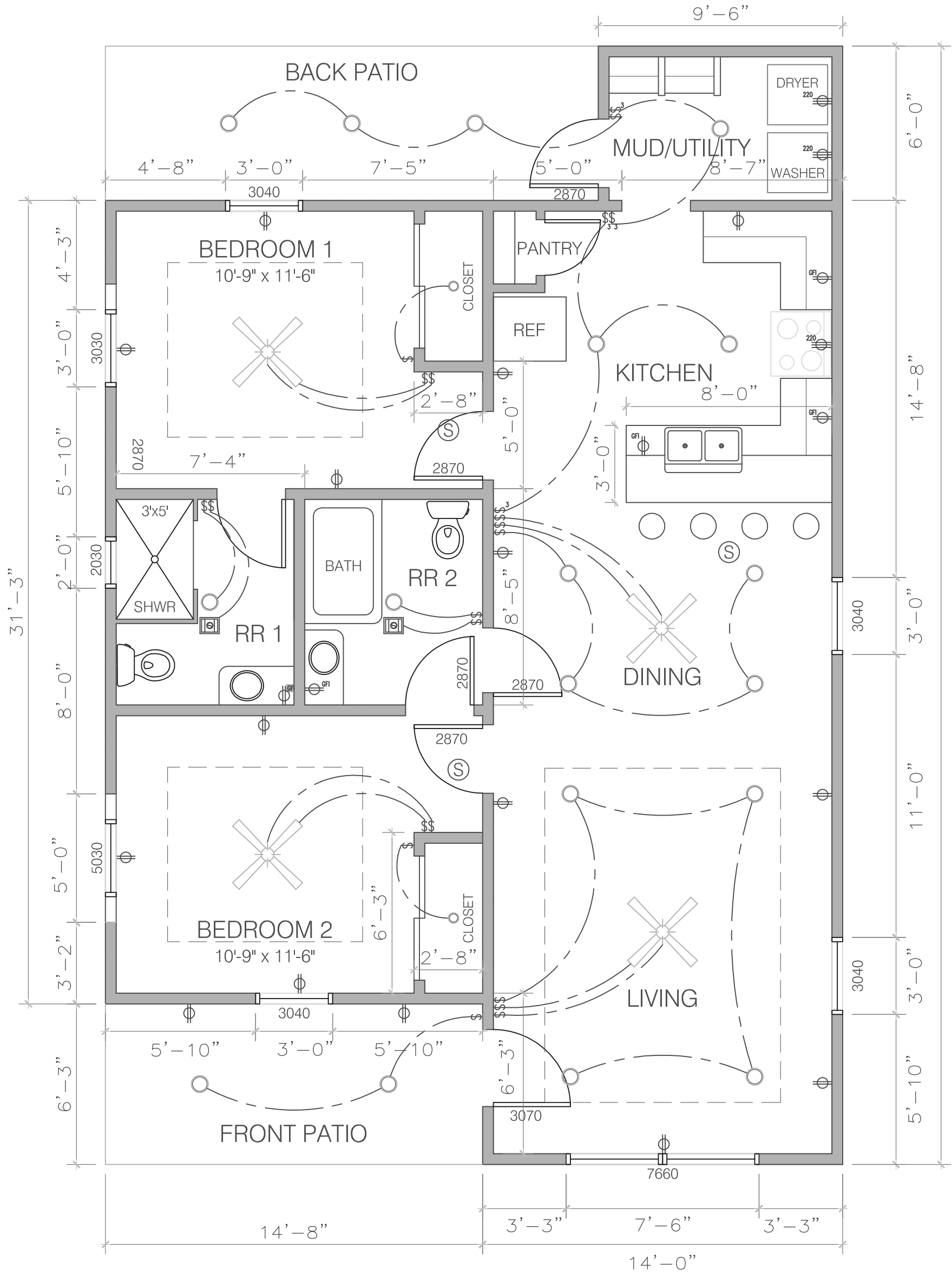
1 FLOOR PLAN – DEMOLITION

SCALE: 1/4"=1'-0"



2 FLOOR PLAN – NEW WORK

SCALE: 1/4"=1'-0"



- NOTES:
- COORDINATE LOCATIONS OF ALL SERVICES, SEPTIC SYSTEM, TRANSFORMERS, WELL, ETC. W/ OWNER
 - COORDINATE BUILDING LOCATION/ORIENTATION ON PROPERTY WITH OWNER
 - FIELD VERIFY ALL WALKS, STEPS, DRIVES, LANDSCAPE BEDS, ETC. WITH OWNER
 - FIELD VERIFY F.F. ELEVATION WITH OWNER
 - COORDINATE HVAC EQUIP. LOCATION WITH OWNER
 - COORDINATE GUTTER & DOWN SPOUT LOCATIONS WITH OWNER

GENERAL NOTES

- THE GENERAL CONTRACTOR SHALL ESTABLISH AND MAINTAIN CONTROL LINES AND POINTS THROUGHOUT THE DURATION OF THE PROJECT.
- THE CONTRACTOR SHALL REQUIRE ALL INSTALLERS TO VERIFY THAT SUBSTRATES, STARTING POINTS, ETC. CONFORM WITH THE INTENT OF THE CONTRACT DOCUMENTS. INSTALLERS SHALL REPORT, IN WRITING, ANY DISCREPANCIES WHICH AFFECT THE WORK ALLOWING SUFFICIENT TIME TO ENABLE THE GENERAL CONTRACTOR TO DETERMINE AND EXECUTE CORRECTIVE MEASURES REQUIRED, BUT NO LATER THAN ONE WEEK PRIOR TO THE SCHEDULED START OF THE WORK.
- DIMENSIONS ARE TO FINISH FACE OF MATERIAL UNLESS NOTED OTHERWISE.
- ALL VENTS, EXHAUST, FANS AND APPLIANCES THAT REQUIRE VENTING TO BE VENTED TO OUTSIDE IN ACCORDANCE WITH ALL APPLICABLE CODES.
- SEE FOUNDATION PLAN PROVIDED BY OTHERS FOR PORCH AND STOOP DIMENSIONS.
- SMOKE ALARMS SHALL BE HARD WIRED IN SERIES WITH BATTERY BACKUP POWER IN ACCORDANCE WITH APPLICABLE CODE.
- VERIFY LOCATION FOR GAS AND ELECTRIC SERVICE TO HOUSE WITH THE CITY.
- FRAMING AND STRUCTURAL DESIGN TO MEET 90MPH WIND CRITERIA PER SECT. R-301.2.1.14, TABLE R-301.

FURNITURE + EQUIPMENT ARE INCLUDED FOR REFERENCE ONLY. INFORMATION IS INCLUDED TO ASSIST THE CONTRACTOR IN COORDINATING POWER REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ELECTRICAL AND OTHER AFFECTED TRADES.

SYMBOL LEGEND

2X4 WD. FRAMED WALL

HINGED DOOR

POCKET DOOR

DEMOLITION

ELECTRICAL NOTES + LEGEND

SWITCH

3-WAY SWITCH

POWER OUTLET

GROUND-FAULT INT. CIRCUIT

220v OUTLET

TELEPHONE JACK

CABLE OUTLET

24" CEILING FAN

EXHAUST FAN

SMOKE DETECTOR

WALL SCONCE

CEILING MOUNTED FIXTURE

MAIN POWER ELECTRICAL PANEL

- CONTRACTOR TO MAKE FULL SUBMITTAL OF ALL LIGHT FIXTURES AND ELECTRICAL DEVICES FOR ARCHITECT APPROVAL.
- ALL SUBSTITUTIONS ARE SUBJECT TO ARCHITECTS WRITTEN APPROVAL.
- SWITCH & POWER LOCATIONS ARE FOR QUANTITY ONLY. WALK JOB W/ARCHITECT & OWNER AFTER INSTALLATION OF BOXES BUT BEFORE WIRING TO VERIFY LOCATIONS.
- POWER OUTLETS TO BE 12" A.F.F TO CENTER OF J-BOX UNLESS OTHERWISE NOTED.
- POWER OUTLETS ABOVE COUNTERTOPS TO BE 6" OFF FINISHED COUNTERSURFACE & TURNED HORIZONTALLY.
- ALL SWITCHES/ CONTROLS TO BE 42" ABOVE FINISHED FLR.

VILLAREAL RESIDENCE
911 BURLESON
SAN ANTONIO, TX 78202

PREPARED ON BEHALF OF
LONNIE SANCHEZ
(210) 385-7264

MAY 03, 2021

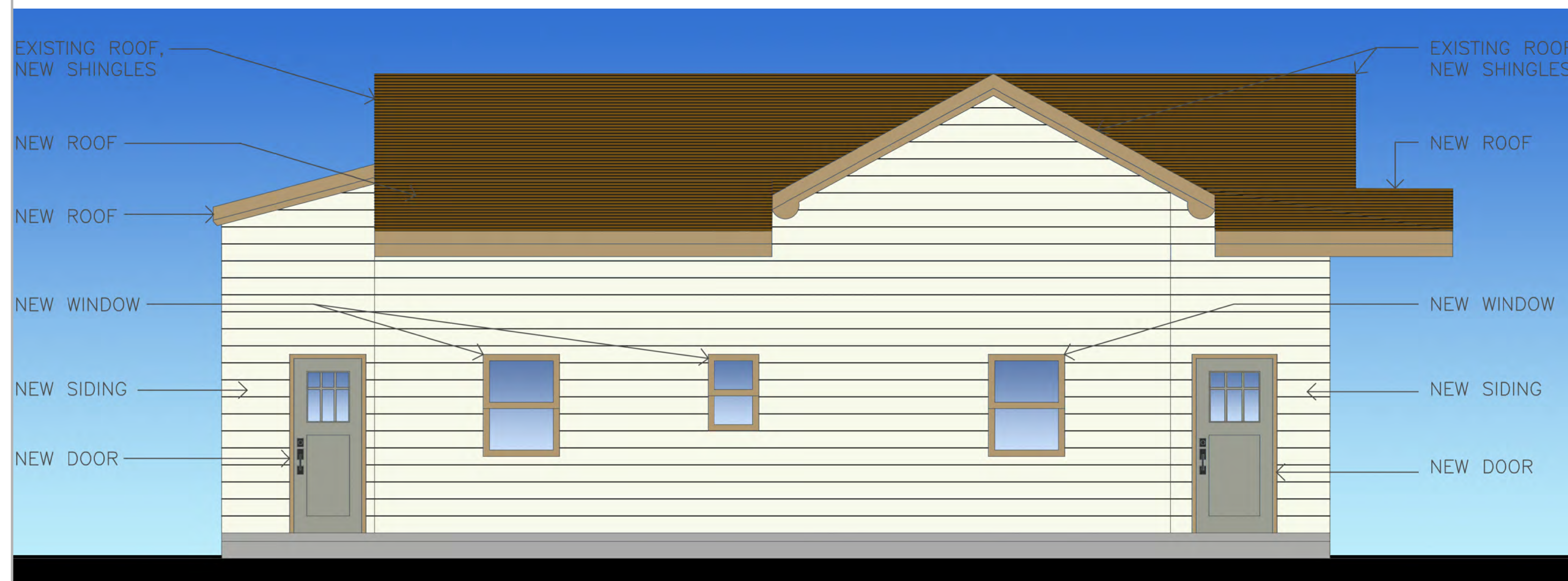
SITE PLAN



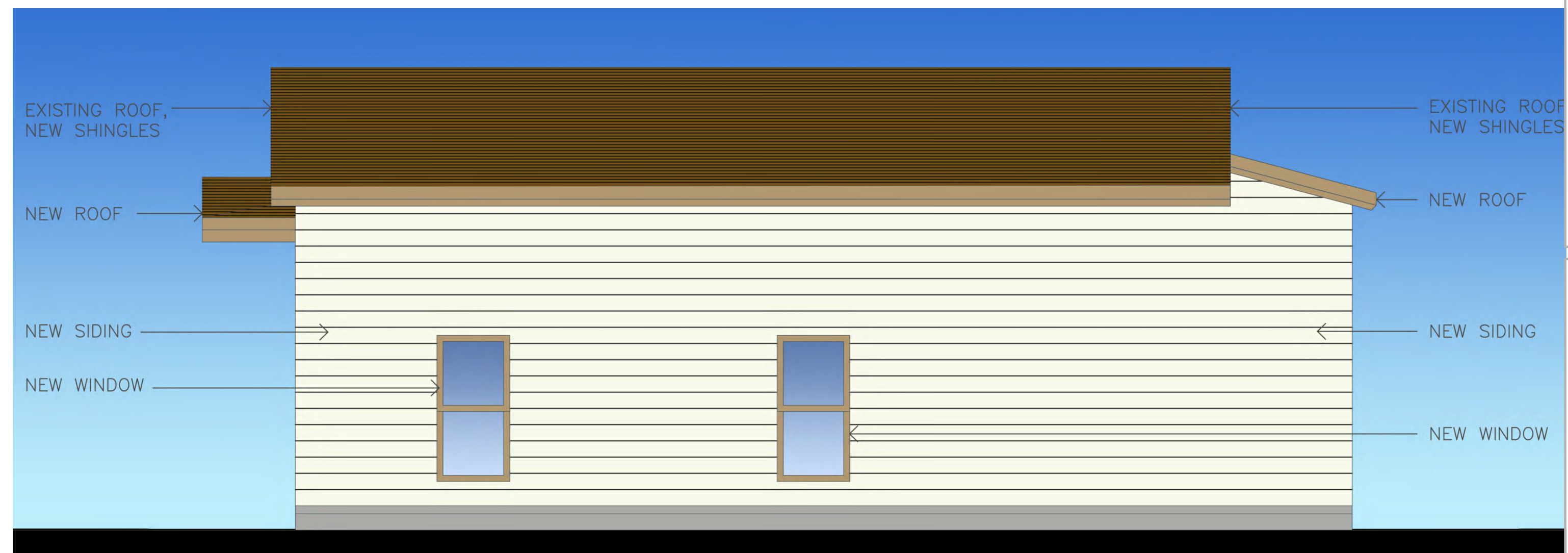
① SOUTH ELEVATION — EXISTING
SCALE: NO SCALE



② SOUTH ELEVATION — NEW WORK
SCALE: 1/4"=1'-0"



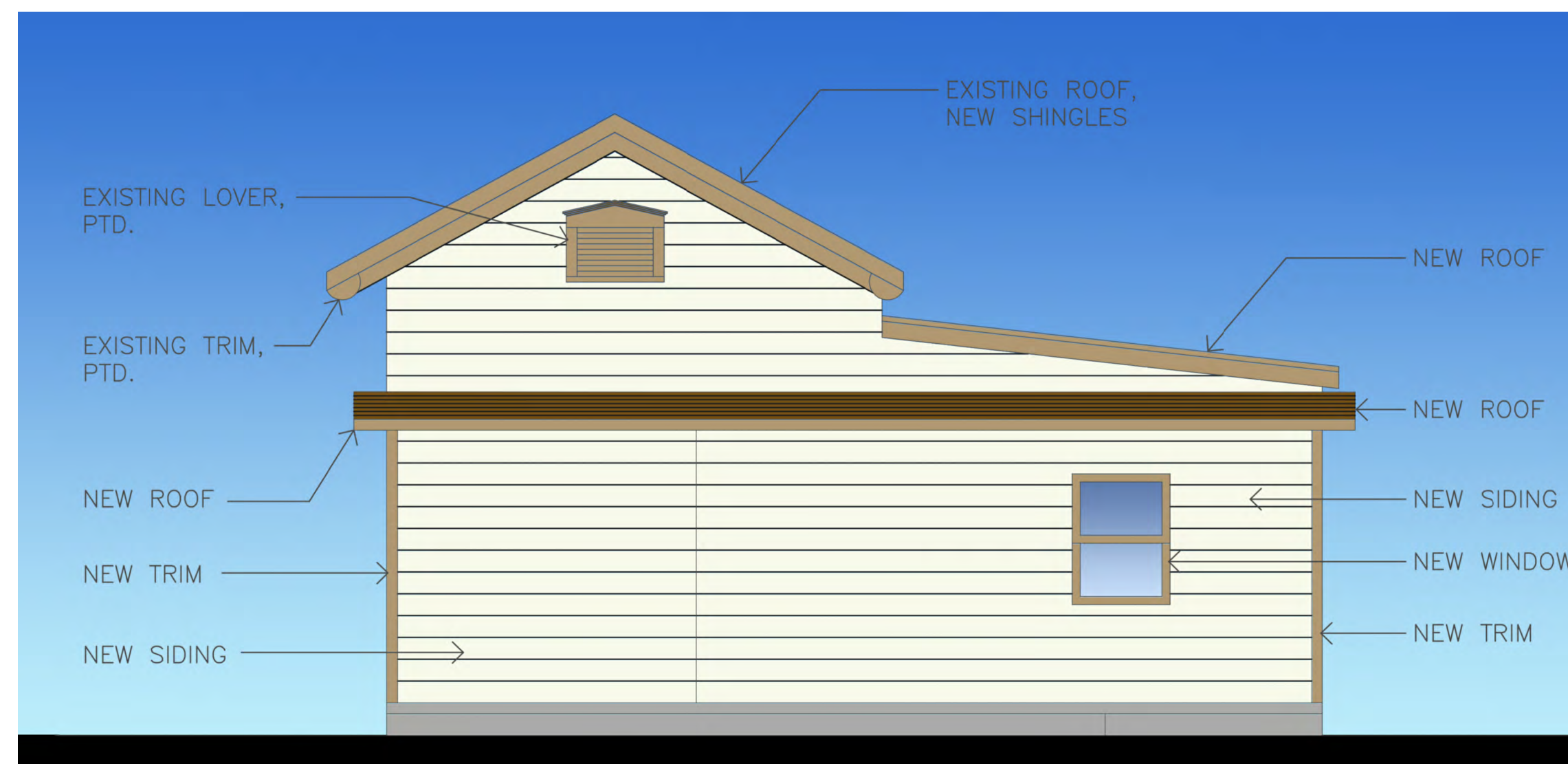
③ WEST ELEVATION — NEW WORK
SCALE: 1/4"=1'-0"



④ EAST ELEVATION — NEW WORK
SCALE: 1/4"=1'-0"



⑤ NORTH ELEVATION — EXISTING
SCALE: NO SCALE



⑥ NORTH ELEVATION — NEW WORK
SCALE: 1/4"=1'-0"

GENERAL NOTES

1. THE GENERAL CONTRACTOR SHALL ESTABLISH AND MAINTAIN CONTROL LINES AND POINTS THROUGHOUT THE DURATION OF THE PROJECT.
2. THE CONTRACTOR SHALL REQUIRE ALL INSTALLERS TO VERIFY THAT SUBSTRATES, STARTING POINTS, ETC. CONFORM WITH THE INTENT OF THE CONTRACT DOCUMENTS. INSTALLERS SHALL REPORT, IN WRITING, ANY DISCREPANCIES WHICH AFFECT THE WORK ALLOWING SUFFICIENT TIME TO ENABLE THE GENERAL CONTRACTOR TO DETERMINE AND EXECUTE CORRECTIVE MEASURES REQUIRED, BUT NO LATER THAN ONE WEEK PRIOR TO THE SCHEDULED START OF THE WORK.
3. DIMENSIONS ARE TO FINISH FACE OF MATERIAL UNLESS NOTED OTHERWISE.
4. ALL VENTS, EXHAUST, FANS AND APPLIANCES THAT REQUIRE VENTING TO BE VENTED TO OUTSIDE IN ACCORDANCE WITH ALL APPLICABLE CODES.
5. SEE FOUNDATION PLAN PROVIDED BY OTHERS FOR PORCH AND STOOP DIMENSIONS.
6. SMOKE ALARMS SHALL BE HARD WIRED IN SERIES WITH BATTERY BACKUP POWER IN ACCORDANCE WITH APPLICABLE CODE.
7. VERIFY LOCATION FOR GAS AND ELECTRIC SERVICE TO HOUSE WITH THE CITY.
8. FRAMING AND STRUCTURAL DESIGN TO MEET 90MPH WIND CRITERIA PER SECT. R-301.2.1.14, TABLE R-301.

- NOTES:
1. COORDINATE LOCATIONS OF ALL SERVICES, SEPTIC SYSTEM, TRANSFORMERS, WELL, ETC. W/ OWNER
 2. COORDINATE BUILDING LOCATION/ORIENTATION ON PROPERTY WITH OWNER
 3. FIELD VERIFY ALL WALKS, STEPS, DRIVES, LANDSCAPE BEDS, ETC. WITH OWNER
 4. FIELD VERIFY F.F. ELEVATION WITH OWNER
 5. COORDINATE HVAC EQUIP. LOCATION WITH OWNER
 6. COORDINATE GUTTER & DOWN SPOUT LOCATIONS WITH OWNER

VILLAREAL RESIDENCE
911 BURLESON
SAN ANTONIO, TX 78202

PREPARED ON BEHALF OF
LONNIE SANCHEZ
(210) 385-7264

MAY 03, 2021

ELEVATIONS

A-3



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1" x 6" D & Better Yellow Pine Siding - Pattern 117

Sign in to see pricing and availability which varies by market

SKU: YP16RL117D

Yellow pine is known as one of the strongest and most versatile species for siding.

LENGTH

6'

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DETAILS

Yellow pine is known as one of the strongest and most versatile species for siding.

- 1 inch x 6 inches
- Pattern 117
- D & better grade

SPECIFICATIONS



[Home](#) » [Building Materials](#) » [Lumber](#) » [Posts, Beams & Timbers](#) » 8x8-10' #2 Or Better Rough Cedar

8x8-10' #2 Or Better Rough Cedar

McCoy's Part #:01395525



ON SALE
\$303.291

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17 available at San Marcos

This item has a maximum purchase limit of 16. Please contact the store if you require a higher quantity.

Product Information

Description
McCoy's proudly carries iLevel by Weyerhaeuser products in many locations. Brands vary by location. For more details, please contact your store team.
Features
<ul style="list-style-type: none">Decay ResistantLow Thermal ConductivityTermite ResistantEasy to Work withDimensional stabilitySelection may vary by store location; please contact your local store for availabilityActual sizes are approximate and may vary from piece to piece.
Specifications
This product has no specifications.

What are you looking for today?

Q

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Paint / Caulking / Caulk



\$2.58

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DAP Alex Plus 10.1-oz White Paintable Latex Caulk

Item #219873 Model #18101

- Paintable in 30 minutes
- Adheres to a wide variety of surfaces
- Cured caulk is mold and mildew resistant

−

1

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DAP Alex Plus 10.1-oz White
Paintable Latex Caulk

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- Paintable in 30 minutes
- Adheres to a wide variety of surfaces
- Cured caulk is mold and mildew resistant
- 100% waterproof seal
- Easy water clean up and low in odor
- Interior and exterior use
- 40 year durability and exceeds ASTM C834 specification










Use and Care
Guide
PDF



CA Prop 65
PDF

CA Residents:  [Prop 65 Warning\(s\)](#) 

SPECIFICATIONS

Warranty	Limited lifetime	For Use on Glass	
Mildew Resistant		For Use on Metal	
Heat Resistance in Degrees F	N/A	For Use on Marine	
CA Residents: Prop 65 Warning(s)	 Prop 65 WARNING(S)	For Use on Concrete	
		For Use on Trim/Moulding	

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REVIEWS



DAP Alex Plus 10.1-oz White
Paintable Latex Caulk

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THIS ITEM



Name

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DAP Alex Fast Dry 10.1-oz White Paintable Latex Caulk

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or

24 Months Special Financing**
when you spend \$1,999 or more.



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DAP Alex Plus 10.1-oz White Paintable Latex Caulk

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DAP Alex Plus 10.1-oz White Paintable Latex Caulk

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Craftsman/Dutch Marginal 6 Lite SDL 1 Panel Mahogany Door • 6'8" Tall

Door Size: 36" width

Door Style: Craftsman

Craftsman Design: Marginal 6 Lite SDL

Wood Specie: Mahogany

Glass Options: Clear, Water, Large Flemish, Rain

Door Panel: 1 Panel

Also Available: Dutch Door option (Pre-hung only) or Dentil Shelf

ENVIRONMENTAL DATA SHEET

(Certified Product Data Sheet)

Date of Preparation

Apr 14, 2021

11 00 [2730]

PRODUCT NUMBER

C7W351

PRODUCT NAME

DuraCraft® Exterior Acrylic Latex, Satin, Extra White

MANUFACTURER'S NAME

THE SHERWIN-WILLIAMS COMPANY

101 W. Prospect Avenue

Cleveland, OH 44115

This document includes all data required by 40 CFR 63.801(a) for a Certified Product Data Sheet under criteria specified in 40 CFR 63.805(a). All data given below are MAXIMUM THEORETICAL VALUES based on the product AS CURRENTLY FORMULATED. Variations may occur on individual batches due to adjustments made during production.

Hazard Category (for SARA 311.312)

C7W351 = | Acute | Chronic |

Product Weight

9.65 lb/gal

Specific Gravity

1.16

FLASH POINT

N.A.

Volatile Ingredients

Chemical / Compound	SARA 302 EHS	CERCLA	SARA 313 TC	HAPS 112	% by Weight	% by Volume
Water 7732-18-5	N	N	N	N	58	67

Regulated Compounds

	SARA 302 EHS	CERCLA	SARA 313 TC	HAPS 112	% by Weight	% by Volume
Zinc Compound	N	N	Y	N	1	

Volatile Organic Compounds - U.S. EPA / Canada

	C7W351	
	LB/Gal	g/L
Coating Density	9.65	1155
	By wt	By vol
Total Volatiles	59.2%	68.5%
Federally exempt solvents		
Water	57.9%	67.1%
Non-Organic Volatiles		
Ammonium Hydroxide	0.1%	0.2%
Organic Volatiles	1.2%	1.3%
Percent Non-Volatile	40.8%	31.5%
VOC Content	LB/Gal	g/L
Total	0.11	13
Less exempt solvents	0.35	42
Of solids	0.37	44
Of solids	0.02 lb/lb	0.02 kg/kg
	By wt	
By wt LVP-VOC	0.0%	

Maximum Incremental Reactivity (MIR) (per US EPA Aerosol Ctg Rule, MIR Values 2009) **0.02**

Volatile Organic Compounds - California

	C7W351	
	LB/Gal	g/L
Coating Density	9.65	1155
	By wt	By vol
Total Volatiles	59.2%	68.5%
Exempt solvents		
Water	57.9%	67.1%
Non-Organic Volatiles		
Ammonium Hydroxide	0.1%	0.2%
Organic Volatiles	1.2%	1.3%
Percent Non-Volatile	40.8%	31.5%
VOC Content	LB/Gal	g/L
Total	0.11	13
Less exempt solvents	0.35	42
Of solids	0.37	44
Of solids	0.02 lb/lb	0.02 kg/kg
	By wt	
By wt LVP-VOC	0.0%	

Maximum Incremental Reactivity (MIR) (per California Air Resources Board Aerosol Products Regulation, MIR Values 2010) **0.02**

Volatile Organic Compounds - South Coast Air Quality Management District, California, US

	C7W351	
	LB/Gal	g/L
Coating Density	9.65	1155
	By wt	By vol
Total Volatiles	59.2%	68.5%
Exempt solvents		
Water	57.9%	67.1%
Non-Organic Volatiles		
Ammonium Hydroxide	0.1%	0.2%
Organic Volatiles	1.2%	1.3%
Percent Non-Volatile	40.8%	31.5%
VOC Content	LB/Gal	g/L
Total	0.11	13
Less exempt solvents	0.35	42
Of solids	0.37	44
Of solids	0.02 lb/lb	0.02 kg/kg

Volatile Organic Compounds - EU Directive 2004/42/EC

	C7W351	
	By wt	By vol
Total Volatiles	59.4%	68.6%
VOC Content	LB/Gal	g/L
Total	0.13	16

Volatile Organic Compounds - EU Directive 2010/75/EU

	C7W351	
	By wt	By vol
Total Volatiles	58.8%	68.0%
VOC Content	LB/Gal	g/L
Total	0.07	9

Volatile Organic Compounds - Mexico

	C7W351	
	LB/Gal	g/L
Coating Density	9.65	1155
	By wt	By vol
Total Volatiles	59.2%	68.5%
Exempt solvents		
Water	57.9%	67.1%
Non-Organic Volatiles		
Ammonium Hydroxide	0.1%	0.2%
Organic Volatiles	1.2%	1.3%
Percent Non-Volatile	40.8%	31.5%
VOC Content	LB/Gal	g/L
Total	0.11	13
Less exempt solvents	0.35	42
Of solids	0.37	44
Of solids	0.02 lb/lb	0.02 kg/kg

Hazardous Air Pollutants (Clean Air Act, Section 112(b))

	C7W351	
	LB/Gal	kg/L
Volatile HAPS	0.00	0.000
Of solids	0.00	0.000
Of solids	0.00 lb/lb	0.00 kg/kg

Air Quality Data

Density of Organic Solvent Blend

8.40 lb/gal

Photochemically Reactive

No

Additional Regulatory Information

US EPA TSCA:

Not Applicable

Relevant identified uses of the substance or mixture and uses advised against:

Not Applicable

Waste Disposal

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Addition of reducers or other additives to this product may substantially alter the above data. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

SAFETY DATA SHEET

C7W351

Section 1. Identification

Product name : DuraCraft® Exterior Acrylic Latex, Satin Extra White

Product code : C7W351

Other means of identification : Not available.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Paint or paint related material.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

Emergency telephone number of the company : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

Product Information Telephone Number : US / Canada: 1-800-474-3794
Mexico: Not Available

Regulatory Information Telephone Number : US / Canada: (216) 566-2902
Mexico: Not Available

Transportation Emergency Telephone Number : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : CARCINOGENICITY - Category 2

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Suspected of causing cancer.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection.

Response : IF exposed or concerned: Get medical advice or attention.

Storage : Store locked up.

Date of issue/Date of revision : 4/14/2021 **Date of previous issue** : 11/5/2020

C7W351 DuraCraft® Exterior Acrylic Latex, Satin Extra White

Version : 11

1/12

SHW-85-NA-GHS-US

Section 2. Hazards identification

- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
- Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.
- Hazards not otherwise classified** : None known.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

CAS number/other identifiers

Ingredient name	% by weight	CAS number
Titanium Dioxide	≤10	13463-67-7
Zinc Oxide	≤3	1314-13-2
Heavy Paraffinic Oil	≤1	64742-54-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.

Date of issue/Date of revision : 4/14/2021	Date of previous issue : 11/5/2020	Version : 11	2/12
C7W351	DuraCraft® Exterior Acrylic Latex, Satin Extra White	SHW-85-NA-GHS-US	

Section 4. First aid measures

- Inhalation** : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments : No specific treatment.
Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions :

Section 6. Accidental release measures

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	CAS #	Exposure limits
Titanium Dioxide	13463-67-7	ACGIH TLV (United States, 3/2020). TWA: 10 mg/m ³ 8 hours.
Zinc Oxide	1314-13-2	OSHA PEL (United States, 5/2018). TWA: 15 mg/m ³ 8 hours. Form: Total dust NIOSH REL (United States, 10/2016). CEIL: 15 mg/m ³ Form: Dust TWA: 5 mg/m ³ 10 hours. Form: Dust and fumes

Section 8. Exposure controls/personal protection

Heavy Paraffinic Oil	64742-54-7	<p>STEL: 10 mg/m³ 15 minutes. Form: Fume OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. Form: Fume TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust ACGIH TLV (United States, 3/2020). TWA: 2 mg/m³ 8 hours. Form: Respirable fraction STEL: 10 mg/m³ 15 minutes. Form: Respirable fraction OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. ACGIH TLV (United States, 3/2020). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist</p>
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Occupational exposure limits (Canada)

Ingredient name	CAS #	Exposure limits
Titanium dioxide	13463-67-7	<p>CA British Columbia Provincial (Canada, 1/2020). TWA: 10 mg/m³ 8 hours. Form: Total dust TWA: 3 mg/m³ 8 hours. Form: respirable fraction CA Quebec Provincial (Canada, 7/2019). TWAEV: 10 mg/m³ 8 hours. Form: Total dust. CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 10 mg/m³ 8 hours. CA Ontario Provincial (Canada, 6/2019). TWA: 10 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 20 mg/m³ 15 minutes. TWA: 10 mg/m³ 8 hours.</p>
Zinc Oxide	1314-13-2	<p>CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 2 mg/m³ 8 hours. Form: Respirable 15 min OEL: 10 mg/m³ 15 minutes. Form: Respirable CA British Columbia Provincial (Canada, 1/2020). TWA: 2 mg/m³ 8 hours. Form: Respirable STEL: 10 mg/m³ 15 minutes. Form: Respirable CA Ontario Provincial (Canada, 6/2019). TWA: 2 mg/m³ 8 hours. Form: Respirable particulate matter. STEL: 10 mg/m³ 15 minutes. Form: Respirable particulate matter. CA Quebec Provincial (Canada, 7/2019). TWAEV: 5 mg/m³ 8 hours. Form: fume STEV: 10 mg/m³ 15 minutes. Form: fume CA Saskatchewan Provincial (Canada, 7/2013).</p>

Section 8. Exposure controls/personal protection

STEL: 10 mg/m³ 15 minutes. Form: respirable dust and fume
TWA: 2 mg/m³ 8 hours. Form: respirable dust and fume

Occupational exposure limits (Mexico)

	CAS #	Exposure limits
Zinc Oxide	1314-13-2	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 2 mg/m ³ 8 hours. Form: Respirable fraction STEL: 10 mg/m ³ 15 minutes. Form: Respirable fraction

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Not available.
Odor	: Not available.
Odor threshold	: Not available.
pH	: 9.2
Melting point/freezing point	: Not available.
Boiling point/boiling range	: 100°C (212°F)
Flash point	: Closed cup: Not applicable.
Evaporation rate	: 0.09 (butyl acetate = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: 2.3 kPa (17.5 mm Hg) [at 20°C]
Vapor density	: 1 [Air = 1]
Relative density	: 1.16
Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >0.205 cm ² /s (>20.5 cSt)
Molecular weight	: Not applicable.

Aerosol product

Heat of combustion	: 0.839 kJ/g
--------------------	--------------

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium Dioxide	Skin - Mild irritant	Human	-	72 hours 300 ug l	-
Zinc Oxide	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Titanium Dioxide	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
Heavy Paraffinic Oil	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Section 11. Toxicological information

Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium Dioxide Zinc Oxide	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours
	Acute IC50 1.85 mg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute IC50 46 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute LC50 98 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1.1 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
Zinc Oxide	-	28960	high

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

Section 14. Transport information

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to IMO instruments : Not available.

Proper shipping name : Not available.

Section 15. Regulatory information

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

International regulations

International lists :

- Australia inventory (AIIIC)**: Not determined.
- China inventory (IECSC)**: Not determined.
- Japan inventory (CSCL)**: Not determined.
- Japan inventory (ISHL)**: Not determined.
- Korea inventory (KECI)**: Not determined.
- New Zealand Inventory of Chemicals (NZIoC)**: Not determined.
- Philippines inventory (PICCS)**: Not determined.
- Taiwan Chemical Substances Inventory (TCSI)**: Not determined.
- Thailand inventory**: Not determined.
- Turkey inventory**: Not determined.
- Vietnam inventory**: Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	1
Flammability		0
Physical hazards		0

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Classification	Justification
CARCINOGENICITY - Category 2	Calculation method

History

Date of printing : 4/14/2021

Date of issue/Date of revision : 4/14/2021	Date of previous issue : 11/5/2020	Version : 11	11/12
C7W351	DuraCraft® Exterior Acrylic Latex, Satin Extra White	SHW-85-NA-GHS-US	

Section 16. Other information

Date of issue/Date of revision : 4/14/2021

Date of previous issue : 11/5/2020

Version : 11

Key to abbreviations :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- SGG = Segregation Group
- UN = United Nations

 Indicates information that has changed from previously issued version.

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

DuraCraft®

Exterior Latex Satin

C07-Series


**SHERWIN
WILLIAMS®**

CHARACTERISTICS

DuraCraft Exterior Latex is a good commercial quality exterior **DuraCraft** is recommended for use on aluminum, vinyl, and wood siding, clapboard, shakes, shingles, plywood, masonry, cementitious board, and metal.

DuraCraft Exterior Latex can be applied down to a surface and air temperature of 35°F.

Color: Most Colors

Coverage: 350-400 sq. ft. per gallon
@ 4 mils wet; 1.3 mils dry

Drying Time, @ 50% RH:

	@ 35-45°F	@ 45°F +
Touch:	2 hours	2 hours
Recoat:	24-48 hours	4 hours

Drying and recoat times are temperature, humidity, and thickness dependent

Finish: 10-20 units @ 60°

Tinting with CCE only:

Base:	oz. per gallon	Strength:
Extra White	0-6	SherColor
Deep Base	4-12	SherColor
Ultra Deep Base	10-12	SherColor

Extra White C07W00351

(may vary by color)

V.O.C. (less exempt solvents):

less than 50 grams per litre; 0.42 lbs. per gallon

As per 40 CFR 59.406

Volume Solids: 32 ± 2%

Weight Solids: 41 ± 2%

Weight per Gallon: 9.65 lbs

Flash Point: N/A

Vehicle Type: 100% Acrylic

Shelf Life: 36 months unopened

WVP Perms (US) 31.24 grains/(hr ft² in Hg)

Mildew Resistant

This coating contains agents which inhibit the growth

COMPLIANCE

As of 08/21/2020, Complies with:

OTC	Yes
OTC Phase II	Yes
SCAQMD	Yes
CARB	Yes
CARB SCM 2007	Yes
Canada	Yes
LEED® v4 & v4.1 Emissions	N/A
LEED® v4 & v4.1 V.O.C.	Yes
EPD-NSF®	N/A
MIR-NSF®	N/A
Inventory	Yes
MPI®	Yes

APPLICATION

When the air temperature is at 35°F, substrates may be colder; prior to painting, check to be sure the air, surface, and material temperature are above 35°F and at least 5°F above the dew point. Avoid using if rain or snow is expected within 2-3 hours.

Do not apply at air or surface temperatures below 35°F or when air or surface temperatures may drop below 35°F within 48 hours.

No reduction necessary.

Brush: Use a nylon-polyester brush.

Roller: Use a high quality 3/8-3/4 inch nap synthetic roller cover.

For brushes and rollers, please refer to our Brush and Roller Guide on Sherwin-Williams.com

Spray—Airless 2000 p.s.i.
Pressure .015-.019 inch
Tip

APPLICATION TIPS

Make sure product is completely agitated (mechanically or manually) before use.

SPECIFICATIONS

Standard latex primers cannot be used below 50°F. See primer label for that product's application conditions.

Aluminum & Aluminum Siding¹,

Galvanized Steel¹

2 coats DuraCraft Exterior Latex

Concrete Block, CMU, Split face Block

1 coat Loxon Acrylic Block Surfacers

2 coats DuraCraft Exterior Latex

Brick, Stucco, Cement, Concrete

1 coat Loxon Concrete and Masonry Primer³ or

Loxon Conditioner²

2 coats DuraCraft Exterior Latex

Cement Composition Siding-Panels

1 coat Loxon Concrete and Masonry Primer³ or

Loxon Conditioner²

2 coats DuraCraft Exterior Latex

Plywood

1 coat Exterior Latex Primer

2 coats DuraCraft Exterior Latex

*Vinyl Siding

2 coats DuraCraft Exterior Latex

Wood (Cedar, Redwood)⁴

1 coat Exterior Oil-Based Wood Primer²

2 coats DuraCraft Exterior Latex

¹ On large expanses of metal siding, the air, surface, and material temperatures must be 50°F or higher.

² Not for use at temperatures under 50°F. See primer label for that product's application conditions.

³ Not for use at temperatures under 40°F. See primer label for that product's application conditions.

⁴ Knots and some woods, such as redwood and cedar, contain a high amount of tannin, a colored wood extract. For best results on these woods, use a coat of Exterior Oil-Based Wood Primer.

Other primers may be appropriate.

When repainting involves a drastic color change, a coat of primer will improve the hiding performance of the topcoat color.

DuraCraft®

Exterior Latex Satin

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at **1-800-424-LEAD** (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull. Stains from water, smoke, ink, pencil, grease, etc. should be sealed with the appropriate primer-sealer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Aluminum and Galvanized Steel:

Wash to remove any oil, grease, or other surface contamination. All corrosion must be removed with sandpaper, wire brush, or other abrading method.

Cement Composition Siding-Panels:

Remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, and peeling or defective coatings. Allow the surface to dry thoroughly. If the surface is new, test it for pH, if the pH is higher than 9, prime with Loxon Concrete & Masonry Primer.

Caulking:

Gaps between windows, doors, trim, and other through-wall openings can be with the appropriate caulk after priming the surface.

Concrete, Masonry, Cement, Block:

All new surfaces must be cured according to the supplier's recommendations—usually about 30 days. Remove all form release and curing agents. Rough surfaces should be to provide a smooth surface. If painting cannot wait 30 days, allow the surface to cure 7 days and prime the surface with Loxon Concrete & Masonry Primer. Cracks, voids, and other holes should be repaired with an elastomeric patch or sealant. **Concrete masonry units (CMU)** - Surface should be thoroughly clean and dry. Air, material and surface temperatures must be at least 50°F (10°C) before Use Loxon Acrylic Block Surfacers. The must be thoroughly dry before topcoating.

Stucco:

Remove any loose stucco, or laitance. Allow new stucco to cure at least 30 days before painting. If painting cannot wait 30 days, allow the surface to dry 7 days and prime with Loxon Concrete & Masonry Primer. Repair cracks, voids, and other holes with an elastomeric patch or sealant.

SURFACE PREPARATION

Mildew:

Prior to attempting to remove mildew, it is always recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint. Bleach alternative cleaning solutions may be advised.

Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach-water solution.

Previously Painted Surfaces:

If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Steel:

Rust and mill scale must be removed using sandpaper, wire brush, or other abrading method. Bare steel must be primed the same day as cleaned.

***Vinyl or other PVC Building Products:**

Clean the surface thoroughly by scrubbing with warm, soapy water. Rinse thoroughly, if needed prime with appropriate white primer. Do not paint vinyl with any color darker than the original color. Do not paint vinyl with a color having a Light Value (LRV) of less than 56. Painting with darker colors lower than an LRV of 56 may cause vinyl to warp. Follow all painting guidelines of the vinyl manufacturer when painting. Only paint properly installed vinyl siding. Deviating from the manufacturer's painting guidelines may cause the warranty to be voided.

Wood, Plywood, Composition Board:

Clean the surface thoroughly then sand any exposed wood to a fresh surface. Patch all holes and imperfections with a wood or putty and sand smooth. All new and patched areas must be primed. Knots and some woods, such as redwood and cedar, contain a high amount of tannin, a colored wood extract. If applied to these bare woods, it may show some staining. If staining persists, spot prime severe areas with 1 coat of Exterior Oil-Based Wood Primer prior to using.

CAUTIONS

For Exterior use only
Protect from freezing.
Non-photochemically reactive.

Before using, carefully read **CAUTIONS on label**

ZINC: Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. **FIRST AID:** In case of eye contact, thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. **WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

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FRC, SP

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.



Fiberglass-Based Asphalt Shingles & Accessories

Guide Specifications

PROJECT ARCHITECT RESPONSIBILITY: This is a general specification guide, intended to be used by experienced construction professionals, in conjunction with good construction practice and professional judgment. This guide is to aid in the creation of a complete building specification that is to be fully reviewed and edited by the architect of record (specifier). Sections of this guide should be included, edited, or omitted based on the requirements of a specific project. It is the responsibility of both the specifier and the purchaser to determine if a product or system is suitable for its intended use within their projects respective zip code. Neither Owens Corning, nor any of its subsidiary or affiliated companies, assume any responsibility for the content of this specification guide relative to actual projects and specifically disclaim any and all liability for any errors or omissions in design, detail, structural capability, attachment details, shop drawings or other construction related details, whether based upon the information provided by Owens Corning or otherwise.

SECTION 07 31 13.13 - FIBERGLASS-BASED ASPHALT SHINGLES & ACCESSORIES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Roof shingles and accessories including the following:
 - 1. Fiberglass-based asphalt shingles.
 - 2. Hip and ridge shingles.
 - 3. Starter shingles.
 - 4. Self-adhering ice and water barrier.
 - 5. Shingle underlayment.
 - 6. Attic ventilation.
 - 7. Fasteners.
 - 8. Metal flashing and trim.

1.2 RELATED SECTIONS

****NOTE TO SPECIFIER** Delete and/or add other sections as required.**

- A. Section 061000 - Rough Carpentry.
- B. Section 071300 – Sheet Waterproofing.
- C. Section 072200 - Roof and Deck Insulation; for insulation placed over roof decking.
- D. Section 076000 - Flashing and Sheet Metal; for snow guards, metal flashing and drip edges, including step-type flashing installed with shingles.
- E. Section 077100 – Roof Specialties: Manufactured Gutters and Downspouts.
- F. Section 077200 - Roof Accessories.
- G. Section 086000 – Roof Windows and Skylights.

****NOTE TO SPECIFIER** Delete references from the list below that are not required.**

1.3 REFERENCES

- A. American Society of Civil Engineers (ACSE):
 - 1. ASCE 7 – Minimum Design Loads for Buildings and Other Structures.
- B. Asphalt Roofing Manufacturers Association (ARMA).



Fiberglass-Based Asphalt Shingles & Accessories

Guide Specifications

- C. ASTM International (ASTM):
1. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 2. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
 3. ASTM B370 - Standard Specification for Copper Sheet and Strip for Building Construction.
 4. ASTM D226 - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
 5. ASTM D228 - Standard Test Method for Sampling, Testing, and Analysis of Asphalt Roll Roofing, Cap Sheets, and Shingles Used in Roofing and Waterproofing.
 6. ASTM D1079 - Standard Terminology Relating to Roofing and Waterproofing.
 7. ASTM D1970 - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
 8. ASTM D3018 - Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules.
 9. ASTM D3161 - Standard Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method).
 10. ASTM D3462 - Standard Specification for Asphalt Shingles Made from Glass felt and Surfaced with Mineral Granules
 11. ASTM D4586 - Standard Specification for Asphalt Roof Cement, Asbestos-Free.
 12. ASTM D4869 - Standard Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing.
 13. ASTM D6381 - Standard Test Method for Measurement of Asphalt Shingle Mechanical Uplift Resistance.
 14. ASTM D6757 - Standard Specification for Underlayment Felt Containing Inorganic Fibers Used in Steep-Slope Roofing.
 15. ASTM D7158 - Standard Test Method for Wind Resistance of Sealed Asphalt Shingles (Uplift Force/Uplift Resistance Method).
 16. ASTM E108 - Standard Test Methods for Fire Tests of Roof Coverings.
 17. ASTM F1667 - Standard Specification for Driven Fasteners: Nails, Spikes, and Staples.
 18. ASTM D6163 - Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Glass Fiber Reinforcements
 19. ASTM D6164 - Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Polyester Reinforcements
- D. Cool Roof Rating Council (CRRC): Product Rating Program.
- E. Canadian Standards Association (CSA): CSA A123.5 - Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules. Note: Applicable only to products sold for use in Canada.
- F. California Building Standards Commission (CBSC):
1. California Building Code, California Code of Regulations Title 24.
- G. FM Approvals
1. FM 4474 - American National Standard for Evaluating the Simulated Wind Uplift Resistance of Roof Assemblies Using Static Positive and/or Negative Differential Pressures.
- H. Florida Building Commission (FBC):
1. Florida Building Code.
 2. Florida Product Approvals.
- I. Environmental Protection Agency (EPA): ENERGY STAR Rating System.
- J. International Code Council (ICC):
1. International Residential Code (IRC).



Fiberglass-Based Asphalt Shingles & Accessories

Guide Specifications

- 2. International Building Code (IBC).
- K. International Code Council Evaluation Service (ICC-ES)
 - 1. ICC-ES Evaluation Reports.
 - 2. ICC-ES Acceptance Criteria.
- L. Intertek
 - 1. Intertek Code Compliance Research Report (CCRR)
- M. Miami-Dade County Department of Regulatory and Economic Resources (RER), Product Control Section:
 - 1. Miami-Dade County Notice of Acceptance (NOA).
- N. National Roofing Contractors Association (NRCA).
- O. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) – Architectural Sheet Metal Manual.
- P. Texas Department of Insurance (TDI): Product Listing.
- Q. Underwriters Laboratories (UL):
 - 1. UL 790 - Standard Test Methods for Fire Test of Roof Coverings.
 - 2. UL 997 – Wind Resistance of Prepared Roof Covering Materials.
 - 3. UL 2218 - Impact Resistance of Prepared Roof Covering Materials.
 - 4. UL 2390 - Test Method for Wind Resistant Asphalt Shingles with Sealed Tabs.
 - 5. UL 1897 – Uplift Tests for Roof Covering Systems
- R. PRI Evaluation Services
 - 1. PRI Evaluation Reports.
- S. US Green Building Council (USGBC): Leadership in Energy and Environmental Design (LEED).

1.4 REGULATORY REQUIREMENTS AND CERTIFICATIONS

- A. Provide a roofing system having an Underwriters Laboratories (UL) Class A fire resistance classification.
- B. When applicable provide a roofing system that will help to qualify points for LEED certification:
 - 1. Sustainable Site credit – Heat Island Reduction.
 - 2. Materials and Resource credit – Building Product Disclosure and Optimization - Environmental Product Declaration (manufacturer specific Environmental Product Declarations).
 - 3. Materials and Resource credit – Building Product Disclosure and Optimization – Sourcing of Raw Materials.
 - 4. Materials and Resources credit – Construction and Demolition Waste Management.
- C. When applicable provide a roofing system achieving ENERGY STAR certification.
- D. Install all roofing products in accordance with all federal, state and local building codes.
- E. All work shall be performed in a manner consistent with current OSHA guidelines.

****NOTE TO SPECIFIER**** Delete as required.

1.5 PRODUCT ATTRIBUTES



Fiberglass-Based Asphalt Shingles & Accessories

Guide Specifications

- A. When applicable, provide fiberglass-based asphalt shingle with SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.

1.6 SUBMITTALS

- A. Submit under provisions of Section 013300 - Submittal Procedures.
- B. Submit printed copies of Owens Corning product data sheets indicating product characteristics, product information, installation instructions (including required preparation and installation procedures) and product limitations and color samples.
- C. Certificate of Compliance: Provide Certificate of Compliance from independent laboratory indicating that Owens Corning asphalt shingles made in normal production meet or exceed the requirements of the following:
1. ASTM D3462.
 2. ASTM D3161/D7158 – Indicating a Class of Wind Resistance.
 3. ASTM E108/UL790 – Indicating Class A Fire Resistance.
- D. LEED submittal: When appropriate provide a LEED submittal and coordinate with provisions in Section 013563 – Sustainability Certification Project Requirements and Section 013566 – Sustainability Certification Project Procedures.
- E. Shop Drawings: Indicate specially configured metal flashing, jointing methods and locations, fastening methods and locations, and installation details as required by project conditions.
- F. Copy of Warranty: For warranty specified in Section 1.9.

****NOTE TO SPECIFIER** Delete selection samples if colors have already been selected.**

- G. Selection Samples: Two complete sets of samples, representing manufacturer's full range of available products and colors.
- H. Verification Samples: For each product and finish specified, two samples representing actual products and colors.

1.7 PRE-INSTALLATION MEETING

- A. For all projects, a pre-installation meeting is strongly recommended. Conduct a pre-installation meeting at the site prior to commencing work in this section. Require attendance of entities directly concerned with roof installation.

Topics to be discussed:

1. Safety procedures.
 2. Installation procedures/method (including substrate preparation), sequencing of materials, and coordination with installation of other/adjacent work.
 3. Roofing material availability, storage and handling.
 4. Additional roof covering and roof accessory materials.
 5. Through roof penetrations and other roof details.
 6. Product compliance – Verify that products comply with requirements specified by local Authority Having Jurisdiction (AHJ)
 7. All other items related to successful execution/completion of work.
- B. Submit printed copies of Owens Corning product data sheets indicating product characteristics, product information, installation instructions (including required preparation and installation procedures), product limitations and color samples.



Fiberglass-Based Asphalt Shingles & Accessories

Guide Specifications

1.8 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Provide all primary roofing products, including shingles, underlayment, ice and water barrier, and ventilation, by a single manufacturer.
- B. Installer Qualifications: Installer shall be licensed or otherwise authorized by all federal, state and local authorities to install all products specified in this section. Installer shall follow Owens Corning published installation instructions.

****NOTE TO SPECIFIER** Delete one of two options below. Select option based on desired warranty.**

- 1. Installer shall be an Owens Corning Roofing Platinum Preferred Contractor as defined and certified by Owens Corning.
- 2. Installer shall be an Owens Corning Roofing Preferred Contractor as defined and certified by manufacturer.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to site in manufacturer's unopened bundles with labels intact and legible.
- B. Store all products in manufacturer's unopened, labeled packaging until they are ready for installation.
- C. Store all products in accordance with Owens Corning recommendations.
- D. Do not install underlayment or shingles on wet surfaces.
- E. Store and dispose of solvent-based materials in accordance with all federal, state and local regulations.
- F. For rooftop loading, lay shingle bundles flat. Do not bend over the ridge.

1.10 PROJECT CONDITIONS

- A. Do not install systems under environmental conditions outside Owens Corning recommended limits. Proceed with work only when existing and forecasted weather conditions will permit work to be performed within Owens Corning recommended limits.

1.11 WARRANTY

- A. Standard Limited Warranty: Provide to the Owner Corning standard prorated warranty coverage for materials in the event of a material defect, including up to 10 years Tru Protection® coverage. Refer to actual warranty for complete details, limitations and requirements.
- B. Manufacturer's Extended Limited Warranty: Provide to the Owner Owens Corning standard extended warranty coverage labor and materials in the event of a material defect. Refer to actual warranty for complete details, limitations and requirements.

****NOTE TO SPECIFIER** Delete one of two options below. Select option based on desired warranty.**

- 1. Owens Corning System Protection Roofing Limited Warranty including extended Tru Protection® (non-prorated) coverage on installed Owens Corning Roofing System products. The length of the Tru Protection® coverage is based upon the shingle product installed on the field of the roof. Coverage can only be provided by a designated Owens Corning Roofing Preferred or Platinum Preferred Contractor.
- 2. Owens Corning Preferred Protection Roofing System Limited Warranty includes Tru Protection® (non-prorated) coverage on installed Owens Corning Roofing System products. The length of the Tru Protection® coverage is based upon the shingle product installed on the field of the roof. This warranty will also cover workmanship defects by the installer. Coverage can only be provided by a designated Owens Corning Roofing Preferred or Platinum Preferred Contractor.



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3. Owens Corning Platinum Protection Roofing System Limited Warranty includes Tru Protection® (non-prorated) coverage on installed Owens Corning Roofing System products. The length of the Tru Protection® coverage is based upon the shingle product installed on the field of the roof. This warranty will also cover workmanship defects by the installer. Coverage can only be provided by a designated Owens Corning Roofing Platinum Preferred Contractor.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Owens Corning Roofing and Asphalt, LLC. One Owens Corning Pkwy. Toledo, OH 43659. Toll Free: 1-800-ROOFING. Email: ocbuildingspec@owenscorning.com. Web: www.owenscorning.com.
- B. Requests for substitutions will be considered in accordance with provisions of Section 016000.

2.2 ASPHALT SHINGLES

****NOTE TO SPECIFIER** Delete roof shingle products from the list below that are not required.**

****NOTE TO SPECIFIER** Verify with the manufacturer regional product availability.**

- A. Duration® Premium (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
 1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
 2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 3. Exposure: 5-5/8 in (143 mm).
 4. Shingles per Square: 64.
 5. Bundles per Square: 4 bundles of 16 shingles.
 6. Coverage per Square: 98.4 sq ft (9.1 sq m).
 7. Color: As selected from manufacturer's full range.
 8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, and PRI ER 1378E01.
- B. Duration® Premium (Non Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
 1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
 2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 3. Exposure: 5-5/8 in (143 mm).
 4. Shingles per Square: 64.
 5. Bundles per Square: 4 bundles of 16 shingles.
 6. Coverage per Square: 98.4 sq ft (9.1 sq m).
 7. Color: As selected from manufacturer's full range.
 8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, and PRI ER 1378E01.
- C. Duration® Premium COOL (Non-Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
 1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
 2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 3. Exposure: 5-5/8 in (143 mm).



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4. Shingles per Square: 64.
 5. Bundles per Square: 4 bundles of 16 shingles.
 6. Coverage per Square: 98.4 sq ft (9.1 sq m).
 7. Color: As selected from manufacturer's full range.
 8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), meets the ENERGY STAR® requirements for initial solar reflectance of 0.25 and 3-year aged solar reflectance of 0.15, 2010 California Building Energy Efficiency Standards, Title 24, Part 6 requirements, Listed by the Cool Roof Rating Council (CRRC), ICC-ES AC438, PRI ER 1378E01, and Florida Product Approval.
- D. TruDefinition® Duration® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
 2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 3. Exposure: 5-5/8 in (143 mm).
 4. Shingles per Square: 64.
 5. Bundles per Square: 3 bundles of 20 or 22 shingles.
 6. Coverage per Square: 98.4 sq ft (9.1 sq m).
 7. Color: As selected from manufacturer's full range.
 8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, PRI ER 1378E01, Florida Product Approval, and Miami-Dade County Product Approval.
- E. TruDefinition® Duration® (Non-Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
 2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 3. Exposure: 5-5/8 in (143 mm).
 4. Shingles per Square: 64.
 5. Bundles per Square: 3 bundles of 20 or 22 shingles.
 6. Coverage per Square: 98.4 sq ft (9.1 sq m).
 7. Color: As selected from manufacturer's full range.
 8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, PRI ER 1378E01, Florida Product Approval, and Miami-Dade County Product Approval.
- F. TruDefinition® Duration® COOL (Non-Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
 2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 3. Exposure: 5-5/8 in (143 mm).
 4. Shingles per Square: 64.
 5. Bundles per Square: 3 bundles of 20 or 22 shingles.
 6. Coverage per Square: 98.4 sq ft (9.1 sq m).
 7. Color: As selected from manufacturer's full range.



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8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), Listed by the Cool Roof Rating Council (CRRC), ICC-ES AC438, PRI ER 1378E01, Florida Product Approval, and Miami-Dade County Product Approval.
- G. TruDefinition® Duration® COOL PLUS (Non-Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
 1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
 2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 3. Exposure: 5-5/8 in (143 mm).
 4. Shingles per Square: 64.
 5. Bundles per Square: 3 bundles of 20 or 22 shingles.
 6. Coverage per Square: 98.4 sq ft (9.1 sq m).
 7. Color: As selected from manufacturer's full range.
 8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), Listed by the Cool Roof Rating Council (CRRC), ICC-ES AC438, PRI ER 1378E01, Florida Product Approval, and Miami-Dade County Product Approval.
- H. TruDefinition® Duration® Designer Color Collection (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
 1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
 2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 3. Exposure: 5-5/8 in (143 mm).
 4. Shingles per Square: 64.
 5. Bundles per Square: 3 bundles of 20 or 22 shingles.
 6. Coverage per Square: 98.4 sq ft (9.1 sq m).
 7. Color: As selected from manufacturer's full range.
 8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL790 (Class A Fire Resistance), CSA A123.5, Florida Product Approval, Miami-Dade County Product Approval, ICC-ES AC438, and PRI ER 1378E01.
- I. TruDefinition® Duration® Designer Color Collection (Non Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
 1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
 2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 3. Exposure: 5-5/8 in (143 mm).
 4. Shingles per Square: 64.
 5. Bundles per Square: 3 bundles of 20 or 22 shingles.
 6. Coverage per Square: 98.4 sq ft (9.1 sq m).
 7. Color: As selected from manufacturer's full range.
 8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL790 (Class A Fire Resistance), Florida Product Approval, Miami-Dade County Product Approval, ICC-ES AC438, and PRI ER 1378E01..
- J. TruDefinition® Duration MAX® (Non Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
 1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**



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2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 3. Exposure: 5-5/8 in (143 mm).
 4. Shingles per Square: 64.
 5. Bundles per Square: 4 bundles of 16 shingles.
 6. Coverage per Square: 98.4 sq ft (9.1 sq m).
 7. Color: As selected from manufacturer's full range.
 8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, and PRI ER 1378E01.
- K. TruDefinition® Duration STORM® Impact Resistant (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface; and UL 2218 Class 4 impact resistance.**
 2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 3. Exposure: 5-5/8 in (143 mm).
 4. Shingles per Square: 64.
 5. Bundles per Square: 3 bundles of 20 or 22 shingles.
 6. Coverage per Square: 98.4 sq ft (9.1 sq m).
 7. Color: As selected from manufacturer's full range.
 8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), UL 2218 (Class 4 Impact Resistance), CSA A123.5, ICC-ES AC438, and PRI ER 1378E01.
- L. TruDefinition® Duration FLEX® Impact Resistant (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface; and UL 2218 Class 4 impact resistance.**
 2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 3. Exposure: 5-5/8 in (143 mm).
 4. Shingles per Square: 64.
 5. Bundles per Square: 3 bundles of 20 or 22 shingles.
 6. Coverage per Square: 98.4 sq ft (9.1 sq m).
 7. Color: As selected from manufacturer's full range.
 8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), UL 2218 (Class 4 Impact Resistance), and PRI ER 1378E01.
- M. TruDefinition® Oakridge® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 2. Exposure: 5-5/8 in (143 mm).
 3. Shingles per Square: 64.
 4. Bundles per Square: 3.
 5. Coverage per Square: 98.4 sq ft (9.1 sq m).
 6. Color: As selected from manufacturer.
 7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), , ICC-ES AC438, PRI ER 1378E01, Florida Product Approval, and Miami-Dade County Product Approval
- N. TruDefinition® WeatherGuard® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.



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1. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 2. Exposure: 5-5/8 in (143 mm).
 3. Shingles per Square: 64.
 4. Bundles per Square: 4.
 5. Coverage per Square: 98.4 sq ft (9.1 sq m).
 6. Color: As selected from manufacturer's full range.
 7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), UL 2218 (Class 4 Impact Resistance), ICC-ES AC438, and PRI ER 1378E01.
- O. Oakridge® (Non Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 2. Exposure: 5-5/8 in (143 mm).
 3. Shingles per Square: 64.
 4. Bundles per Square: 3 bundles of 20 or 22 shingles.
 5. Coverage per Square: 98.4 sq ft (9.1 sq m).
 6. Color: As selected from manufacturer's full range.
 7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), Florida Product Approval, Miami-Dade County Product Approval, CSA A123.5, ICC-ES AC438, and PRI ER 1378E01. Shasta White Color meets ENERGY STAR requirements for initial solar reflectance of 0.25 and 3-year aged solar reflectance of 0.15.
- P. Oakridge® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 2. Exposure: 5-5/8 in (143 mm).
 3. Shingles per Square: 64.
 4. Bundles per Square: 3 bundles of 20 or 22 shingles.
 5. Coverage per Square: 98.4 sq ft (9.1 sq m).
 6. Color: As selected from manufacturer's full range.
 7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, PRI ER 1378E01, Florida Product Approval, and Miami-Dade County Product Approval. Shasta White Color meets ENERGY STAR requirements for initial solar reflectance of 0.25 and 3-year aged solar reflectance of 0.15.
- Q. Berkshire® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 18-3/4 in (476 mm) by 38 in (965 mm).
 2. Exposure: 8-3/8 in. (213 mm).
 3. Shingles per Square: 45.
 4. Bundles per Square: 5 bundles of 9 shingles.
 5. Coverage per Square: 99.5 sq ft (9.2 sq m).
 6. Color: As selected from manufacturer's full range.
 7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, PRI ER 1378E01, Florida Product Approval, and Miami-Dade County Product Approval.
- R. Woodmoor® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.



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1. Nominal Size: 14-1/4 in (362 mm) by 40 in (1016 mm).
 2. Exposure: 4 in (102 mm).
 3. Shingles per Square: 90.
 4. Bundles per Square: 6 bundles of 15 shingles.
 5. Coverage per Square: 100.0 sq ft (9.3 sq m).
 6. Color: As selected from manufacturer's full range.
 7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, and PRI ER 1378E01.
- S. Woodcrest® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 14-1/4 in (362 mm) by 40 in (1016 mm).
 2. Exposure: 4 in (102 mm).
 3. Shingles per Square: 90.
 4. Bundles per Square: 6 bundles of 15 shingles.
 5. Coverage per Square: 100.0 sq ft (9.3 sq m).
 6. Color: As selected from manufacturer's full range.
 7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, and PRI ER 1378E01.
- T. Supreme® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 12 in (305 mm) by 36 in (914 mm).
 2. Exposure: 5 in (127 mm).
 3. Shingles per Square: 80.
 4. Bundles per Square: 3 bundles of 26, 27, 27 shingles.
 5. Coverage per Square: 100.0 sq ft (9.3 sq m).
 6. Color: As selected from manufacturer's full range.
 7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, PRI ER 1378E01, Florida Product Approval, and Miami-Dade County Product Approval.
- U. Supreme® (Non Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 12 in (305 mm) by 36 in (914 mm).
 2. Exposure: 5 in (127 mm).
 3. Shingles per Square: 80.
 4. Bundles per Square: 3 bundles of 26, 27, 27 shingles.
 5. Coverage per Square: 100.0 sq ft (9.3 sq m).
 6. Color: As selected from manufacturer's full range.
 7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, PRI ER 1378E01, and Florida Product Approval.
- V. Supreme® (Algae Resistant) (Metric) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 2. Exposure: 5-5/8 in (143 mm).
 3. Shingles per Square: 65.
 4. Bundles per Square: 3 bundles of 21, 22, 22 shingles.
 5. Coverage per Square: 100.0 sq ft (9.3 sq m).
 6. Color: As selected from manufacturer's full range.



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7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, and PRI ER 1378E01.
- W. Supreme® (Non Algae Resistant) (Metric) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
 2. Exposure: 5-5/8 in (143 mm).
 3. Shingles per Square: 65.
 4. Bundles per Square: 3 bundles of 21, 22, 22 shingles.
 5. Coverage per Square: 100.0 sq ft (9.3 sq m).
 6. Color: As selected from manufacturer's full range.
 7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, and PRI ER 1378E01.
- X. Classic® (Non Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 12 in (305 mm) by 36 in (914 mm).
 2. Exposure: 5 in (127 mm).
 3. Shingles per Square: 80.
 4. Bundles per Square: 3 bundles of 26, 27, 27 shingles.
 5. Coverage per Square: 100.0 sq ft (9.3 sq m).
 6. Color: As selected from manufacturer's full range.
 7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, PRI ER 1378E01, and Florida Product Approval.
- Y. Mineral Surface Roll (Non Algae Resistant): As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 36 in (914 m) by 36 in (914 mm).
 2. Exposure: 34 in (864 mm).
 3. Rolls per Square: 1.
 4. Coverage per Square: 100.0 sq ft (9.3 sq m).
 5. Standards/Qualifications: ASTM E108/UL 790 (Class C Fire Resistance), and Florida Product Approval.

2.3 HIP AND RIDGE SHINGLES

Provide hip and ridge shingles color formulated to complement field of roof.

****NOTE TO SPECIFIER** Delete hip and ridge shingle products from the list below that are not required.**

****NOTE TO SPECIFIER** Verify with the manufacturer regional product availability.**

- A. DuraRidge® Hip and Ridge (Algae Resistant) Shingles with Sealant: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. **High profile design features patented SureNail® Technology providing long-lasting durability and dimension**
 2. Nominal Size: 12 in (305 mm) by 10 5/8 in (270 mm) with 8 in (203 mm) exposure
 3. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL790 (Class A Fire Resistance), ICC-ES AC438, PRI ER 1378E01, Florida Product Approval, Miami-Dade County Product Approval, and CSA A123.5.
- B. LongRidge™ Extended Hip & Ridge (Algae Resistant) Shingles with Sealant: As manufactured by Owens Corning Roofing & Asphalt, LLC.



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1. Extended 10" exposure provides an attractive, clean and consistent roof line for enhanced curb appeal.
 2. Nominal Size: 13 ¼ (337 mm) by 36 in (914 mm) with 10 in (254 mm) exposure.
 3. Piece Size: 13 ¼ (337 mm) by 12 in (305 mm)
 4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, and PRI ER 1378E01.
- C. RIZERidge® Hip and Ridge (Algae Resistant) Shingles with Sealant: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Foldable design provides multi-layered dimension along hips and ridges.
 2. Nominal Size: 12 in (305 mm) by 36 in (914 mm) with 6 in (152 mm) exposure.
 3. Piece Size: 12 in (305 mm) by 12 in (305 mm).
 4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, PRI ER 1378E01, and Florida Product Approval.
- D. DecoRidge® Hip and Ridge (Non Algae Resistant) Shingles with Sealant
1. Durable, heavyweight laminate construction with SBS-modified asphalt provides maximum dimension and style to the hip and ridge.
 2. Nominal Size: 11-1/2 in (292 mm) by 8 in (203 mm) and 11-1/2 in (292 mm) by 10 in (254 mm) with 8 in (203 mm) exposure.
 3. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), and CSA A123.5.
- E. ProEdge® Hip and Ridge (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Perforated shingles with factory installed cutouts designed for fast and easy installation.
 2. Nominal Size: 12 in (305 mm) by 36 in (914 mm) with 6 in (152 mm) exposure.
 3. Piece Size: 12 in (305 mm) by 12 in (305 mm).
 4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, PRI ER 1378E01, Florida Product Approval, and Miami-Dade County Product Approval.
- F. ProEdge® Hip and Ridge (Non Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Perforated shingles with factory installed cutouts designed for fast and easy installation.
 2. Nominal Size: 12 in (305 mm) by 36 in (914 mm) with 6 in (152 mm) exposure.
 3. Piece Size: 12 in (305 mm) by 12 in (305 mm).
 4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, PRI ER 1378E01, and Florida Product Approval.
- G. ProEdge® Hip and Ridge (Algae Resistant) (Metric) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Perforated shingles with factory installed cutouts designed for fast and easy installation.
 2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm) with 6-5/8 in (168 mm) exposure.
 3. Piece Size: 9-27/32 in (250 mm) by 13-1/4 in (337 mm).
 4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, and PRI ER 1378E01.
- H. ProEdge STORM® Hip and Ridge Impact Resistant (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Perforated design for easy installation offering Class 4 impact resistance.



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2. Nominal Size: 12 in (305 mm) by 36 in (914 mm) with 6 in (152 mm) exposure.
 3. Piece Size: 12 in (305 mm) by 12 in (305 mm).
 4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), UL 2218 (Class 4 Impact Resistance), CSA A123.5, ICC-ES AC438, and PRI ER 1378E01.
- I. ProEdge Flex® Hip and Ridge Impact Resistant (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Perforated design for easy installation offering Class 4 impact resistance.
 2. Nominal Size: 12 in (305 mm) by 36 in (914 mm) with 6 in (152 mm) exposure.
 3. Piece Size: 12 in (305 mm) by 12 in (305 mm).
 4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), UL 2218 (Class 4 Impact Resistance), and PRI ER 1378E01.
- J. Berkshire® Hip and Ridge (Algae Resistant) Shingles: (Algae Resistant) Shingles with Sealant: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. **High profile design features patented SureNail® Technology providing long-lasting durability and dimension**
 2. Nominal Size: 12 in (305 mm) by 10 5/8 in (270 mm) with 8 in (203 mm) exposure
 3. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL790 (Class A Fire Resistance), ICC-ES AC438, PRI ER 1378E01, Florida Product Approval, Miami-Dade County Product Approval, and CSA A123.5.
- K. WeatherGuard® HP Hip and Ridge Impact Resistant (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Perforated design for easy installation offering Class 4 impact resistance.
 2. Nominal Size: 12 in (305 mm) by 36 in (914 mm) with 6 in (152 mm) exposure.
 3. Piece Size: 12 in (305 mm) by 12 in (305 mm).
 4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), UL 2218 (Class 4 Impact Resistance), PRI ER 1378E01, and Florida Product Approval.

2.4 STARTER SHINGLES

****NOTE TO SPECIFIER** Delete starter shingle products from the list below that are not required.**

****NOTE TO SPECIFIER** Verify with the manufacturer regional product availability.**

- A. Starter Shingle Roll: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Self-adhering, starter course. Each strip measures 7-1/5 in (191 mm) tall by 33-2/5 ft (10.1 m) wide.
 2. Standards/Qualifications: Florida Product Approval.
- B. Starter Strip Shingle: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nail applied starter course. Individual starter shingle is 6-5/8 in (168 mm) by 39-3/8 in (1000 mm).
 2. Standards/Qualifications: ASTM D3462, ASTM D3161 (Class F Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, and PRI ER 1378E01
- C. Starter Strip PLUS: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nail applied starter course. Individual starter shingle is 7-3/4 in (197 mm) by 39-3/8 in (1000 mm).
 2. Standards/Qualifications: ASTM D3462, ASTM D3161 (Class F Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, PRI ER 1378E01, Florida Product Approval, and Miami-Dade County Product Approval.



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- D. WoodStart® Starter Shingle: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nail applied starter course. Nominal Size is 13-3/8 in (340 mm) by 40 in (1016 mm).
 2. Standards/Qualifications: ASTM D3462, ASTM D3161 (Class F Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, and PRI ER 1378E01.

2.5 SELF-ADHERING UNDERLAYMENTS

****NOTE TO SPECIFIER** Delete self-adhering ice and water barrier products from the list below that are not required.**

****NOTE TO SPECIFIER** Verify with the manufacturer regional product availability.**

- A. WeatherLock® Mat: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Mat-faced skid resistant surface, self-adhering, self sealing, bituminous ice and water barrier.
 2. Roll Width: 36 in (914 mm).
 3. Selvage: 3 in (76 mm).
 4. Standards/Qualifications: ASTM D1970, ASTM E108/UL 790 (Class A Fire Resistance¹), PRI ER 1378E02, Florida Product Approval, and Miami-Dade County Product Approval.
- B. WeatherLock® G: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Granule skid resistant surface, self-adhering, self sealing, bituminous ice and water barrier.
 2. Roll Width: 36 in (914 mm).
 3. Selvage: 3 in (76 mm).
 4. Standards/Qualifications: ASTM D1970, ASTM E108/UL 790 (Class A Fire Resistance¹), PRI ER 1378E02, Florida Product Approval, and Miami-Dade County Approval.
- C. WeatherLock® Cold Climate: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Granule skid resistant surface, self-adhering, self sealing, bituminous ice and water barrier. Designed for low temperature adhesion.
 2. Roll Width: 36 in (914 mm).
 3. Selvage: 3 in (76 mm).
 4. Standards/Qualifications: ASTM D1970, ASTM E108/UL 790 (Class A Fire Resistance¹),
- D. WeatherLock® Flex: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Cross laminated poly surface with skid resistant traction surface, self-adhering, self sealing, bituminous ice and water barrier.
 2. Roll Width: 36 in (914 mm).
 3. Selvage: 3 in (76 mm).
 4. Standards/Qualifications: ASTM D1970, ASTM E108/UL 790 (Class A Fire Resistance¹), PRI ER 1378E02.
- E. WeatherLock® Specialty Tile and Metal: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Polyester surface with skid resistant traction surface, self-adhering, self sealing, bituminous ice and water barrier.
 2. Thermally stable in high temperatures up to 260 degrees Fahrenheit (126 degrees Celsius).
 3. Designed for use with mechanically fastened tile systems.
 4. Roll Width: 36 in (914 mm).
 5. Selvage: 3 in (76 mm).
 6. Standards/Qualification: ASTM D1970, ASTM E108/UL 790 (Class A/Class C Fire Resistance²), UL 1897, PRI ER 1378E02, Florida Product Approval, and Miami-Dade County Product Approval.
- F. RhinoRoof® GRN: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Granule skid resistant surface, self-adhering, self sealing, bituminous ice and water barrier.
 2. Roll Width: 36 in (914 mm).
 3. Selvage: 3 in (76 mm).



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4. Standards/Qualifications: ASTM D1970, ASTM E108/UL 790 (Class A Fire Resistance¹), PRI ER 1378E02, and Florida Product Approval.
- G. RhinoRoof® MTL: As manufactured by Owens Corning Roofing and Asphalt, LLC.
 1. Cavitated film surface, self-adhering, self sealing, bituminous ice and water barrier.
 2. Roll Width: 36 in (914 mm).
 3. Selvage: 3 in (76 mm).
 4. Standards/Qualifications: ASTM D1970, ASTM E108/UL 790 (Class A Fire Resistance¹), PRI ER 1378E02, and Florida Product Approval.
- H. Titanium® PSU30: As manufactured by Owens Corning Roofing and Asphalt, LLC.
 1. Weather-shedding synthetic polypropylene facer, self-adhering, self sealing, bituminous ice and water barrier.
 2. Roll Width: 36 in (914 mm).
 3. Selvage: 1 in (76 mm).
 4. Standards/Qualifications: ASTM D1970, ASTM E108/UL 790 (Class A Fire Resistance¹), and Florida Product Approval.

¹ Class A fire resistance limited to use under asphalt shingles and quarry slate.

² Class A fire resistance limited to use under asphalt shingles, clay and concrete tile, and quarry slate. Class C fire resistance under metal panels and shingles.

2.6 MECHANICALLY FASTENED UNDERLAYMENTS

****NOTE TO SPECIFIER** Delete shingle underlayment products from the list below that are not required.**

****NOTE TO SPECIFIER** Verify with the manufacturer regional product availability.**

- A. Fiberglas™ Reinforced Felt Underlayment.
 1. Wrinkle resistant, water resistant, breather type cellulose/glass fiber composite roofing underlayment.
 2. Roll Width: 36 in (91.4 cm).
 3. Roll Length: 141.5 ft (43.1 m).
 4. Coverage Per Roll: 4 roof squares.
 5. Standards/Qualifications: ASTM D226 (Type II), ASTM D4869 (Type IV), ASTM D6757, ASTM E108/UL 790 (Class A Fire Resistance¹), and Florida Product Approval.
- B. ProArmor® Synthetic Roof Underlayment.
 1. Weather-shedding synthetic polyolefin barrier.
 2. Roll Width: 42 in (106.7 cm).
 3. Roll Length: 286 ft (87.2 m).
 4. Coverage Per Roll: 9.29 roof squares.
 5. Standards/Qualification: ASTM D226, ASTM D4869, , ASTM E108/UL 790 (Class A Fire Resistance¹), ICC-ES AC188, CCRR-1068, Florida Product Approval, and Miami-Dade County Product Approval.
- C. Deck Defense® High Performance Roof Underlayment.
 1. Weather-shedding synthetic polyolefin barrier.
 2. Roll Width: 48 in (122 cm).
 3. Roll Length: 125 ft (38.1 m) and 250 ft (76.2 m).
 4. Coverage Per Roll: 5 and 10 roof squares.
 5. Standards/Qualification: ASTM D226, , ASTM E108/UL 790 (Class A Fire Resistance¹), Florida Product Approval, and Miami-Dade County Product Approval.
- D. RhinoRoof® U20 Roof Underlayment.
 1. Weather-shedding synthetic polypropylene barrier.
 2. Roll Width: 42 in (110 cm).



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3. Roll Length: 286 ft (87m)
 4. Coverage Per Roll: 10 roof squares.
 5. Standards/Qualification: ASTM D226, , ASTM E108/UL 790 (Class A Fire Resistance¹), ICC-ES AC188, CCRR-1015, Florida Product Approval, and Miami-Dade County Product Approval.
- E. Titaniumf® UDL25 Roof Underlayment.
1. Weather-shedding synthetic polypropylene barrier.
 2. Roll Width: 48 in (122 cm).
 3. Roll Length: 250 ft (76.2m)
 4. Coverage Per Roll: 10 roof squares.
 5. Standards/Qualification: ASTM D226, , ASTM E108/UL 790 (Class A Fire Resistance¹), ICC-ES AC188, CCRR-1024, Florida Product Approval, and Miami-Dade County Product Approval.
- F. Titaniumf® UDL30 Roof Underlayment.
1. Weather-shedding synthetic polypropylene barrier.
 2. Roll Width: 48 in (122 cm).
 3. Roll Length: 250 ft (76.2m)
 4. Coverage Per Roll: 10 roof squares.
 5. Standards/Qualification: ASTM D226, , ASTM E108/UL 790 (Class A Fire Resistance¹), ICC-ES AC188, CCRR-1024, Florida Product Approval, and Miami-Dade County Product Approval.
- G. Titaniumf® UDL50 Roof Underlayment.
1. Weather-shedding synthetic polypropylene barrier.
 2. Roll Width: 48 in (122 cm).
 3. Roll Length: 250 ft (76.2m)
 4. Coverage Per Roll: 10 roof squares.
 5. Standards/Qualification: ASTM D226, , ASTM E108/UL 790 (Class A Fire Resistance¹), ICC-ES AC188, CCRR-1024, Florida Product Approval, and Miami-Dade County Product Approval.

¹ Class A fire resistance limited to use under asphalt shingles.

2.7 LOW SLOPE MODIFIED BITUMEN ROOFING SYSTEMS

****NOTE TO SPECIFIER** Delete products from the list below that are not required.**

****NOTE TO SPECIFIER** Verify with the manufacturer regional product availability.**

- A. DeckSeal Roofing System.
1. A system comprised of component SBS modified bitumen membranes which, used in combination and according to instructions, creates a waterproof low slope roofing system.
 2. A Dual Compound Formulation to meet performance needs of different layers: top coat compound provides excellent granule adhesion (cap sheet), back coat compound provides aggressive adhesion to the substrate.
 3. Granule free adhesive selvage on both the sides and end laps (cap sheet).
 4. The DeckSeal™ System is designed for use on ¼:12 to 2:12 roof slopes.
 5. The DeckSeal™ components include:
 - a) DeckSeal™ SBS SA Cap Sheet - self-adhered granulated cap sheet
 - b) DeckSeal™ SBS SA Base/Ply Sheet - A self-adhered base/ply sheet
 - c) DeckSeal™ MA Nailbase - A nailable base sheet - where a nailable base sheet or self-adhered base/play is used as a base layer for the granulated cap sheet for a minimum recommended 2 ply system, and where a self-adhered base/ply can be used as a 2nd layer in a 3-ply system.
 6. Attractive colors that complement popular shingle offerings.
 7. Roll Dimensions:
 - a) 32 ft. 10 in. by 39-3/8 in. – Cap sheet



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8. b) 65 ft. 8 in. by 39-3/8 in. – Nailable base or self-adhered base
Standards/Qualifications: UL 790/ASTM E108 fire resistance¹; FM 4474 wind uplift resistance²; ASTM D6163 (base/ply sheet), ASTM D6164 (cap sheet); Florida Product Approval for use in HVHZ and Non-HVHZ areas; and Miami-Dade Product Approval.

¹ Class A, B, or C fire resistance based on system used and slope of roof. Consult the UL Online Classification Directory for fire resistance classifications for specific systems.

² Check local building codes for wind uplift requirements and DeckSeal™ literature for wind uplift resistance information.

2.8 ROOF VENTILATION

****NOTE TO SPECIFIER** Delete attic ventilation products from the list below that are not required.**

****NOTE TO SPECIFIER** Verify with the manufacturer regional product availability.**

- A. VentSure® RidgeCat® Rolled Ridge Vent.
1. Shingle-over, low profile ridge vent with nylon entangled-net structure allows the passage of hot and/or moisture-laden air from attics, while prohibiting wind-driven rain.
 2. Provides 15 sq in (9677 sq mm) NFVA per lineal foot.
 3. Available in 20 ft (6.1 m) rolls in three different widths (regional availability): 11 in (279 mm), 7 in (178 mm), and 9 in (229 mm) widths.
 4. Suitable on roofs with a pitch from 2:12 to 18:12.
 5. Standards/Qualifications: Passes Wind-Driven Rain with 8.8 in (224 mm) of rain/hr at 110 mph (177 km/h), ICC-ES AC132, PRI ER 1378E03, Florida Product Approval.
- B. VentSure® Rigid Roll Ridge Vent with Weather PROtector® Moisture Barrier.
1. Shingle-over, low profile ridge vents with Weather PROtector® Moisture Barrier allows the passage of hot and/or moisture-laden air from attics, while prohibiting snow infiltration.
 2. Provides 12.5 sq in (8200 sq mm) NFVA per lineal foot.
 3. Available in 20 ft (6.1 m) rolls in three different widths (regional availability): 7 in (178 mm), 9 in (229 mm), and 11-1/4 in (286 mm).
 4. Suitable on roofs with a pitch from 2:12 to 20:12.
 5. Standards/Qualifications: ICC-ESR 2664, Passes Wind-Driven Rain with 8.8 in (224 mm) of rain/hr at 110 mph (177 km/h), and Snow Infiltration at 35 mph (56 km/h) and 70 mph (112 km/h) Tests, PRI ER 1378E03, Florida Product Approval, and Miami-Dade County Product Approval.
- C. VentSure® 4 ft (1.2 m) Strip Heat and Moisture Ridge Vent, 12 in width
1. Shingle-over, polypropylene ridge ventilator designed to work with eave/soffit intake ventilation to maximize the flow of cool, fresh air through the roof and attic structure.
 2. Patented corrugated ridge design and interlocking feature for additional flexibility and strength
 3. Provides 20 sq in (12900 sq mm) NFVA per lineal foot.
 4. Optional Weather PROtector® filter provides added protection against wind-driven rain and snow infiltration.
 5. 15 in (381 mm) wide and 1 in (25 mm) high, with a shingle-over width of 12 in (305 mm).
 6. Suitable on roofs with a pitch from 3:12 to 6:12.
 7. Standards/Qualifications: Passes Wind-Driven Rain with 8.8 in (224 mm) of rain/hr at 110 mph (177 km/h), PRI ER 1378E03, Florida Product Approval, Miami-Dade County Product Approval, and TDI listed for usage in Texas Coastal Regions (RV-47).
- D. VentSure® 4 ft (1.2 m) Strip Heat and Moisture Ridge Vent, 8 in (203 mm) and 10 in (254 mm) width.
1. Shingle-over, polypropylene ridge ventilator designed to work with eave/soffit intake ventilation to maximize the flow of cool, fresh air through the roof and attic structure.
 2. Patented corrugated ridge design and interlocking feature for additional flexibility and strength.
 3. Provides 18 sq in (11600 sq mm) NFVA per lineal foot.



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4. Optional Weather PROtector® filter provides added protection against wind-driven rain and snow infiltration.
 5. Available in 8 in (203 mm) and 10 in (254 mm) shingle-over widths that are 1 in (25 mm) high and overall product width is 11.43 in (290 mm) and 13.28 in (337 mm), respectively.
 6. Suitable on roofs with a pitch from 3:12 to 16:12.
 7. Standards/Qualifications: Passes Wind-Driven Rain with 8.8 in (224 mm) of rain/hr at 110 mph (177 km/h), PRI ER 1378E03, Florida Product Approval, Miami-Dade County Product Approval, and TDI listed for usage in Texas Coastal Regions (RV-47).
- E. VentSure® SkyRunner LTE™ Rolled Ridge Vent
1. Shingle-over, polypropylene ridge ventilator designed to work with eave/soffit intake ventilation to maximize the flow of cool, fresh air through the roof and attic structure.
 2. Provides 12 sq in (7742 sq mm) NFVA per lineal foot.
 3. Available in 30 ft (9.1 m) rolls in 14-1/2 in (368 mm) width.
 4. Suitable on roofs with a pitch from 2:12 to 16:12.
 5. Standards/Qualifications: Passes Wind-Driven Rain with 8.8 in (224 mm) of rain/hr at 110 mph (177 km/h), ICC-ES AC132, PRI ER 1378E03, Florida Product Approval.
- F. VentSure® Metal Slant Back Roof Vent
1. Rooftop mounted, slant-back designed, metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics.
 2. Each vent provides 51 sq in (32900 sq mm) NFVA.
 3. Aluminum and galvanized steel available in Weathered Grey, Brown, Black, or Mill Finish.
 4. 16 in (406 mm) by 20 in (508 mm) base, 8 in (203 mm) diameter opening.
 5. Suitable on roofs with a pitch up to 12:12.
 6. Standards/Qualifications: TDI listed for usage in Texas Coastal Region (RV-20)
- G. Plastic Slant Back Roof Vent
1. Rooftop mounted, slant-back design with full screen, high-impact resin exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics.
 2. Each vent provides 55 sq in (35500 sq mm) NFVA.
 3. Available in Weathered Grey, Brown, Black, Cedar, or White finish.
 4. 17 in (432 mm) by 18 in (457 mm) base, 9 in (229 mm) by 9 in (229 mm) opening.
 5. Standards/Qualifications: TDI listed for usage in Texas Coastal Regions (RV-20).
- H. VentSure® Metal Square Top Roof Vent
1. Rooftop mounted, square-top designed, metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics.
 2. Each vent provides 51 sq in (32900 sq mm) NFVA.
 3. Aluminum and galvanized steel available in Weathered Grey, Brown, Black, or Mill finish.
 4. 16-1/2 in (419 mm) by 17-1/2 in (445 mm) base, 8 in (203 mm) by 8 in (203 mm) opening.
 5. Suitable on roofs with a pitch up to 12:12.
- I. VentSure® Low Profile Slant Back Roof Vent with Exterior Louver
1. Rooftop mounted, low-profile, slant back metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics.
 2. Each vent provides 72 sq in (46500 sq mm) NFVA.
 3. Galvanized steel available in Black, White Brown, Light Grey, Dark Gray, or Mill finish.
 4. 32 in (813 mm) by 23 in (584 mm) base, 11 in (279 mm) by 11 in (279 mm) opening. Available with extended flange 36 in (914 mm) by 28 in (711 mm).
 5. Suitable on roofs with a 3:12 pitch or greater.
 6. Standards/Qualifications: Miami-Dade County Product Approval.
- J. VentSure® Metal Dome with Screen



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1. Rooftop mounted, dome, metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics, while prohibiting snow infiltration.
 2. Each vent provides 144 sq in (92900 sq mm) NFVA.
 3. Galvanized steel available in Weathered Grey, Brown, Black, or Mill finish.
 4. 25 in (635 mm) by 25 in (635 mm) base, 15 in (381 mm) diameter opening.
 5. Suitable on roofs with a pitch up to 8:12.
- K. VentSure® Internally Braced Premium Turbine Vent
1. Rooftop mounted, turbine designed, metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics with sealed and lubricated stainless steel ball bearings.
 2. Aluminum and galvanized steel available in Weathered Grey, Brown, Black, or Mill finish.
 3. Available with 12 in (305 mm) diameter opening and 16 in (406 mm) base or 14 in (356 mm) diameter opening with 18 in (457 mm) base.
- L. VentSure® Internally Braced Standard Turbine Vent
1. Rooftop mounted, turbine designed, metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics.
 2. Aluminum and galvanized steel available with a 12 in (305 mm) or 14 in (356 mm) opening.
 3. 12 in (305 mm) opening with 16 in (406 mm) base available in Brown, Black, or Mill finish.
 4. 14 in (356 mm) opening with 16 in (406 mm) base available in Mill finish.
- M. VentSure® Externally Braced Premium Turbine Vent
1. Rooftop mounted, turbine designed, metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics with sealed and lubricated stainless steel ball bearings.
 2. Aluminum and galvanized steel available in Weathered Grey, Brown, Black, or Mill finish.
 3. Available with 12 in (305 mm) opening and 16 in (406 mm) base.
- N. VentSure® 1400 CFM Powered Roof Vent
1. Rooftop mounted, 1400 CFM (39.6 cu m/min), metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics.
 2. Each vent provides ventilation for 2000 sq ft (186 sq m) attic
 3. Includes adjustable thermostat and humidistat and 4.5 Amp motor.
 4. Aluminum and galvanized steel available in Weathered Grey, Brown, Black, or Mill finish.
 5. 25 in (635 mm) by 25 in (635 mm) base with 15 in (381 mm) opening.
 6. Suitable on roofs with a pitch up to 8:12.
- O. VentSure® 1080 CFM Powered Roof Vent
1. Rooftop mounted, 1080 CFM (30.6 cu m/min), metal exhaust ventilator designed to evacuate hot air from attics.
 2. Each vent provides ventilation for 1600 sq ft (149 sq m) attic.
 3. Includes adjustable thermostat and humidistat and 2.6 Amp motor.
 4. Aluminum and galvanized steel available in Weathered Grey, Brown, Black or Mill finish.
 5. 25 in (635 mm) by 25 in (635 mm) base with 15 in (381 mm) opening.
 6. Suitable on roofs with a pitch up to 8:12.
- P. VentSure® Aluminum Undereave Intake Vent
1. Rectangular aluminum intake vents designed to introduce fresh, dry air into the attic. Pre-drilled holes for easy installation and fully screened for first line of defense against insects.
 2. Available in Mill and White and three different dimensions designed to work collectively with exhaust vents to provide ventilation to roof structures.
 3. 4 in (102 mm) by 16 in (406 mm) opening provides 16.34 sq in (10500 sq mm) NFVA, 6 in (152 mm) by 16 in (406 mm) opening provides 27.23 sq in (17600 sq mm) NFVA and 8 in (203 mm) by 16 in (406 mm) opening provides 38.12 sq in (24600 sq mm) NFVA.
- Q. VentSure® 8 ft (2.4 m) Continuous Soffit Vent



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1. 8 ft (2.4 m) continuous aluminum soffit vent offering 37.47 sq in (24200 sq mm) NVFA.
 2. Available in 2 in (51 mm) widths, designed to work collectively with exhaust vents to provide ventilation to roof structures.
- R. VentSure® Round Mini Soffit Vent
1. Round miniature aluminum soffit vents designed to introduce fresh, dry air into the attic.
 2. Available in Mill finish and three sizes designed to work collectively with exhaust vents to provide ventilation to roof structures.
 3. 2 in (51 mm) round opening provides 0.64 sq in (4100 sq mm) NFVA, 3 in (76 mm) round opening provides 1.36 sq in (8800 sq mm) NFVA, and 4 in (102 mm) round opening 2.43 sq in (15700 sq mm) NFVA.
- S. VentSure® InFlow® Vent
1. Shingle-over, polypropylene intake vent solution for soffit-less and open-rafter homes, and homes with inadequate intake. Designed to work with exhaust ventilation to help achieve a balanced air ventilation system.
 2. Patent-pending bottom intake design helps protect against wind-driven rain.
 3. 4 ft (2.4 m) strip provides 10 sq in (6500 sq mm) NFVA per lineal foot, or 40 sq in (25800 sq mm) NFVA per vent
 4. Weather PROtector® Moisture Barrier provides added protection against wind-driven rain and snow infiltration.
 5. Roof Mount Unit dimensions: 48 in (1219 mm) length, 15 in (381 mm) width and 1 in (25 mm) height.
 6. Suitable for use on roofs with a pitch from 4:12 to 16:12.
 7. Standards/Qualifications: Passes Wind-Driven Rain with 8.8 in (224 mm) of rain/hr at 110 mph (177 km/h); ICC-ES AC132; TDI listed for usage in Texas Coastal Regions (RV-82) and Florida Product Approval.
- T. VentSure® Solar Attic Exhaust Fan: Roof Mount Unit
1. 25-Watt solar-powered attic ventilator efficiently exhausts hot, humid air from the attic. Designed to work as part of a balanced air ventilation system in conjunction with Undereave/Soffit vents.
 2. Electronic thermostat and humidistat for efficient operation.
 3. Electric backup available for hookup for continued operation after dusk or when adequate solar power is not available.
 4. Ventilates up to 3200 sq ft (297 sq m) attic space (under certain conditions, including adequate intake ventilation).
 5. 38-volt DC Motor (variable speed) with external brushes.
 6. 14 in (356 mm) 3-wing ultra quiet aluminum blades with pitch angle matched to motor/solar panel.
 7. Black, powder-coated, 20 gauge, 0.0396 in (1.006 mm) galvanized steel flashing and housing.
 8. Remote Attic Monitor (optional) displays attic temp, humidity, fan operation, and source of power via portable device from almost anywhere in the home.
 9. Roof Mount Unit dimensions: 26 in (660 mm) length, 26 in (660 mm) width, 10-3/16 in (259 mm) height; Solar Panel Dimensions: 18-3/4 in (476 mm) length, 17-1/4 in (438 mm) width and 1 in (25 mm) height; 36.0 lbs (16.3 kg) shipping weight.
 10. Suitable for use on asphalt-shingled roof decks with a pitch from 3:12 to 16:12.
 11. Standards/Qualifications: TDI listed for use in Texas Coastal Regions (RV-84); Florida Product Approval, and complies with UL 1703 impact resistance requirements.
- U. VentSure® Solar Attic Exhaust Fan: Gable Mount Unit
1. 25-Watt solar-powered attic ventilator efficiently exhausts hot, humid air from the attic. Designed to work as part of a balanced air ventilation system in conjunction with Undereave/Soffit vents.



Fiberglass-Based Asphalt Shingles & Accessories

Guide Specifications

2. Only the solar panel is mounted on the roof with the Gable Mount Solar Attic. The fan is mounted in the attic and vents out the gable vents.
3. Electronic thermostat and humidistat for efficient operation.
4. Electric backup available for hookup for continued operation after dusk or when adequate solar power is not available.
5. Ventilates up to 4200 sq ft (390 sq m) attic space (under certain conditions, including adequate intake ventilation)
6. 38-volt DC Motor (variable speed) with external brushes.
7. 14 in (356 mm) 3-wing ultra quiet aluminum blades with pitch angle matched to motor/solar panel
8. Fan housing is electro-deposition, galvanized, powder coated with 3 mils to 5 mils (0.076 mm to 0.127 mm) thickness.
9. Remote Attic Monitor (optional) displays attic temp, humidity, fan operation, and source of power via portable device from almost anywhere in the home.
10. Gable-Mount Solar Fan Dimensions: 16 in (406 mm) length, 14 in (356 mm) width, and 8-1/2 in (216 mm) height; Solar Panel Dimensions: 18-3/4 in (476 mm) length, 17-1/4 in (438 mm) width and 1 in (25 mm) height; 25.7 lbs (11.6 kg) shipping weight.
11. Suitable for use on roofs with a pitch from 3:12 to 16:12.
12. Standards/Qualifications: Solar panel complies with UL 1703 impact resistance requirements.

2.9 FASTENERS

- A. Fasteners: Galvanized steel, stainless steel, or aluminum nails complying with ASTM F1667, minimum 12-gauge, 0.0808 in (2.05 mm) shank with 3/8 in (9.5 mm) diameter head. Check local building code requirements.

2.10 METAL FLASHING

- A. Flashing: Provide flashing as specified by Section 07600 - Metal Flashing and Sheet Metal.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Prior to starting work, examine all roof decks on which work will be applied for defects in materials and workmanship.
- B. Do not begin installation until the roof deck has been properly prepared.
- C. If another installer is responsible for roof deck preparation, notify the architect, designer-of-record on the project, or building owner of unsatisfactory preparation prior to proceeding with installation. Commencement of installation constitutes acceptance of conditions.
- D. Underlayment and shingles installed directly over roof insulation or similar type decks is not approved.
 1. Roof deck must be dry, minimum 3/4 in (19 mm) thick, minimum 6 in (152 mm) wide boards with maximum 1/4 in (6.4 mm) spaces, or APA rated sheathing (exposure 1): minimum 3/8 in (9.5 mm) plywood, minimum 7/16 in (11.1 mm) oriented strand board. Consult your manufacturer for other approved constructions.
 2. Ventilation under the roof deck must meet local code requirements.

3.2 PREPARATION



Fiberglass-Based Asphalt Shingles & Accessories

Guide Specifications

- A. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- B. Remove all existing roofing down to the roof deck.
- C. Verify that the deck is dry, structurally sound, clean and smooth. It shall be free of any depressions, waves, and projections. Cover ALL holes 1 in (25 mm) or less in diameter, cracks over 1/2 in (13 mm) in width, loose knots and excessively resinous areas with minimum 28 gauge; 0.0187 in (0.475 mm) galvanized steel, 0.0156 in (0.396 mm) stainless steel, or 0.0126 in (0.320 mm) aluminum sheet metal. Decking or deck boards with holes greater than 1 in (25 mm) in diameter shall be replaced.
- D. Replace damaged deck with new materials.
- E. Verify installed roof deck is acceptable to receive shingles. Acceptable roof decks include the following:
 - 1. Wood boards: 6 in (152 mm) minimum width, 3/4 in (19 mm) minimum thickness.
 - 2. Plywood sheathing: 3/8 in (9.5 mm) minimum thickness Exposure 1 grade plywood sheathing as recommended by APA and in compliance with local building code requirements.
 - 3. OSB panels: 7/16 in (11.1 mm) minimum thickness non-veneer structural panels as recommended by APA and in compliance with local building code requirements.
 - 4. Spacing between boards or panels shall not exceed 1/4 in (6.4 mm) between roof boards or 1/8 in (3.2 mm) between plywood or OSB sheathing panels.

3.3 UNDERLAYMENT INSTALLATION

- A. Install Owens Corning™ underlayments using Owens Corning, installation instructions and in accordance with local building code requirements. When local codes and installation instructions are in conflict, the local building code requirements shall take precedence.
 - 1. Install self-adhering ice and water barrier from the eaves edge of roof up the slope a full 36 in (914 mm) but not less than 24 in (610 mm) beyond the interior edge of the exterior wall. Lap ends 6 in (152 mm) on roof decks sloped 5:12 and greater. On roofs with slopes from 2:12 up to 4:12, see application instructions printed on each package.
- B. Drip Edge
 - 1. Drip edge shall be installed on all roof edges.
 - 2. Install drip edge on eaves first with underlayment installed over the drip edge, or install per local code requirements.
 - 3. Install drip edge on rakes after underlayment is installed, with the drip edge fastened over the underlayment.
 - 4. Joints in drip edge shall be lapped minimum 2 in (51 mm) with the upslope piece lapped over the down slope piece, or per local building code requirements
 - 5. Install fasteners 8 in to 10 in (203 mm to 254 mm) on center, approximately 1-3/4 in (44 mm) to 3 in (76 mm) from the outside edge of the drip edge, or per local building code requirements.
- C. Valleys
 - 1. Install self-adhering ice and water barrier at least 36 in (914 mm) wide and centered on the valley. Lap ends 6 in (152 mm) and seal.
 - 2. Where valleys are indicated to be "open valleys", install metal flashing over self-adhering ice and water barrier before roof deck underlayment is installed; DO NOT nail through the flashing. Secure the flashing by nailing at 18 in (457 mm) on center just beyond edge of flashing so that nail heads hold down the edge, or use valley metal with a formed edge and secure with clips.
- D. Roof Deck



Fiberglass-Based Asphalt Shingles & Accessories

Guide Specifications

1. On roofs with slope greater than 4:12, lap horizontal edges at least 2 inches (51 mm) and at least 2 inches (51 mm) over self-adhering ice and water barrier. Lap ends at least 4 inches (102 mm). End laps in succeeding course should be located at least 6 ft (1.8 m) from end laps in the preceding course.
 2. On roofs with pitch between 2:12 to less than 4:12, see application instructions printed on each shingle wrapper, or follow local code requirements.
 3. Lap underlayment over valley protection at least 6 inches (152 mm).
- E. Penetrations
1. Vent pipes: Install a 24 in (610 mm) square piece of self-adhering ice and water barrier lapping over roof deck underlayment; seal tightly to pipe.
 2. Vertical walls: Install self-adhering ice and water barrier extending at least 3 in to 4 in (76 mm to 102 mm) up the wall and 12 in (305 mm) onto the roof surface. Lap the membrane over the roof deck underlayment.
 3. Chimneys: Install self-adhering ice and water barrier around entire chimney extending at least 6 in (152 mm) up the wall and 12 in (305 mm) on to the roof surface. Lap the membrane over the roof deck underlayment.

3.4 SHINGLE INSTALLATION

- A. Install Owens Corning™ shingles (including started shingles as well as hip and ridge shingles) in accordance with Owens Corning installation instructions and in accordance with local building code requirements.
- B. Install starter course at lowest roof edge and along rake with edge of shingles extending 1/4 in (6.4 mm) over edge of roof. Sealant strip should be closest to roof edge.
- C. Install first and successive courses of shingles stepping diagonally up and across roof deck with Owens Corning recommended offset at each succeeding course. Maintain uniform exposure of shingles at each succeeding course. Use of a chalk line every other course is recommended.
- D. Fasten shingles to deck with number of roofing nails per shingle and type of nails specified by Owens Corning, or in accordance specified by local Authority Having Jurisdiction.
- E. All fasteners must be driven flush with the shingle surface and penetrate at least 3/4 in (19.1 mm) into the wood deck. Where the deck is less than 3/4 in (19.1 mm) thick, the fastener should be long enough to penetrate fully and extend through the roof sheathing.
- F. Install Owens Corning shingles at valleys, eaves, rakes, hips and ridges in accordance with Owens Corning installation instructions and local building code requirements.

3.5 LOW SLOPE ROOFING SYSTEM INSTALLATION

- A. Install Owens Corning™ low slope roofing system in accordance with Owens Corning installation instructions and in accordance with local building code requirements.
- B. Owens Corning™ low slope roofing system should only be installed on roofs with a slope of ¼:12 to 2:12.
- C. Apply only when the weather is dry and the ambient temperature is 45°F (7°C) and rising. Do not install when water in any form (i.e. rain, dew, ice, frost, snow) exist.
- D. Apply only over clean, dry, dust-free surfaces
- E. Ensure installation of DeckSeal MA NailBase does not prevent or interfere with ventilation of the existing structure.



Fiberglass-Based Asphalt Shingles & Accessories

Guide Specifications

3.6 VENT INSTALLATION

- A. Install Owens Corning™ vents in accordance with Owens Corning installation instructions and local building code requirements.
- B. Ventilation at minimum must meet or exceed local building code requirements. Owens Corning recommends:
 - 1. Net Free Ventilating Area (NFVA) of 1:150 as a minimum.
 - 2. Balanced approach for most effective ventilation (balance between the lower and upper parts of the roof by providing 50% of NFVA at the soffit and 50% at the ridge).
 - 3. NFVA at the upper part of the roof should not exceed 50%.
 - 4. Where length of the roof ridge is sufficient provide continuous ridge vents for most effective ventilation approach.

3.7 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

SureNail® Technology is proprietary with U.S. and foreign protection including U.S. Patent Nos. 7,836,654; 8,156,704; 8,181,413; 8,240,102; 8,430,983; 8,607,521; 8,623,164; 8,752,351; 8,991,130; 9,121,178; and other patents pending.

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The Home Depot Special Order Quote

Customer Agreement #: H6988-158779

Printed Date: 5/6/2021

Customer: ALBERTO SANCHEZ

Address: 12188 LA VERNIA RD 1
ADKINS, TX 78101

Phone 1: 210-304-0304

Phone 2: 210-304-0304

Store: 6988

Associate: STACY

Address: 3111 SE MILITARY
SAN ANTONIO, TX 78223

Phone: 210-359-7000

Pre-Savings Total: \$1,386.17

Total Savings: (\$0.00)

Pre-Tax Price: \$1,386.17

All prices are subject to change. Customer is responsible for verifying product selections. The Home Depot will not accept returns for the below products.



Catalog Version 0202



Frame Width = 74 1/4"
Frame Height = 71 1/4"

Line Number	Item Summary	Was Price	Now Price	Quantity	Total Savings	Total Price
100-1	74.25-in x 71.25-in Wood W-5500 Fixed Rectangle	\$1,386.17	\$1,386.17	1	\$0.00	\$1,386.17
Unit 100 Total:		\$1,386.17	\$1,386.17		\$0.00	\$1,386.17

Begin Line 100 Description

---- Line 100-1 ----

Wood W-5500,
Direct Set,

74.25 x 71.25

Assembly = Full Unit,
Exterior Trim Type = No Exterior Trim,
Exterior Trim Options = No,

Regional Compliance = US National-WDMA/ASTM
Order By = Rough Opening Size,

Rough Opening Width = Custom Size,
Custom Rough Opening Width = 75,
Rough Opening Height = Custom Size,
Custom Rough Opening Height = 72

Species = Auralast Pine,
Interior Finish Type = Natural,

Finish - Interior = Natural,
Finish - Exterior = Primed

Jamb Width = 4 9/16",

Jamb Thickness = 4/4 JE,

Extension Jamb Shipped Loose = Extension Jamb
Factory Applied

Rating = PG 35,

Sill Nosing = Std Sill Nosing,

Sill Horns = Extended Nosing(Beyond Frame),

Sill Horn Length = 6,

Prep for Stool = No,

Kerf Jamb = No Kerf

Energy Efficiency = Energy Star,

Energy Star Zone = Energy Star - Southern,

STC / OITC Rating = Standard,

Glazing = Insulated,

Glass Color = Low-E 366,

Glass Type = Annealed,

Neat Glass = No,

Glass Thickness = Standard Default Thickness,

Protective Film = Protective Film,

Spacer Color = Silver Spacer,

Glass Options = Argon

Grid Type = No Grids

Certification = None

Window Egress = Does Not Meet Egress

U-Factor = 0.25,

Solar Heat Gain Coefficient = 0.24,

Visible Light Transmittance = 0.54,

Condensation Resistance = 61,

CPD# = JEL-N-713-07399-00001

Room Location = ,

Is This a Remake = No,

Specific Information =

Manufacturer = JELD-WEN, Rantoul(IL),

Contact Number = 1-800-246-9131 Option 2,

Catalog Version Date = 02/23/2021,

Catalog Version = 21.1.8.2

None

End Line 100 Description

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Paint / Primer



\$8.98

★★★★★ 1685

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KILZ 2 Interior or Exterior Multi-Purpose Water-Based Wall and Ceiling Primer (1-Quart)

Item #45545 Model #20002

KILZ 2 is a fast drying, water base, multi surface, Hammerite sealer and stain blocker with excellent adhesion, sealing properties and very mild odor
KILZ 2 All Purpose primer also blocks medium stains and provides a mildew resistant coating
Blocks medium stains

Container Size

1-Quart

>

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1

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KILZ 2 Interior or Exterior Multi-Purpose Water-Based Wall and Ceiling Primer (1-Quart)

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- KILZ 2 is a fast drying, water base, multi surface, Hammerite sealer and stain blocker with excellent adhesion, sealing properties and very mild odor
- KILZ 2 All Purpose primer also blocks medium stains and provides a mildew resistant coating
- Blocks medium stains
- Hides previous colors well, low odor
- Good adhesion and sealer; mildew-resistant
- Stains: water, rust, grease, ink, pencil and felt marker
- Use on: interior, drywall, woodwork, plaster, paneling, wallpaper, masonry, brick and painted metal

 [CA Prop 65 PDF](#)


CA Residents:  [Prop 65 Warning\(s\)](#) 

SPECIFICATIONS

Series Name	2	For Use on Brick		Feedback
Unit of Measure Quantity	32.0	For Use on Metal		
Odor Blocking	×	For Use on Stucco		
For Use on Walls and Ceilings		For Use on Concrete/Masonry		
CA Residents: Prop 65	 Prop 65	For Use on Plaster		

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Wall a
Primo

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6

or

12

or

18

or

24



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Hardware / Structural Hardware / Base & Cap Hardware



☆☆☆☆☆ 0

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OZCO 8-in x 8-in Powder-coated Wood To Wood Post Base Hardware

Item #2598111 Model #52109

Includes: 1 Post Base Plate; 2 Decorative Plates; 4 Hex Cap Nuts; (4) 3/8 H-Bolt; (4) 3-3/4 in. OWT Timber Screws

Fits all standard 8x8 in. from 7-1/2 in. up to 8 in. square

Includes hardware for attaching base to post for standard installations



Feedback




OZCO 8-in x 8-in Powder-coated Wood To Wood Post Base Hardware

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Original and the OWT Elite version has plates on 2 sides instead of all 4 and is fabricated with steel that is 40-percent thinner.


- Includes: 1 Post Base Plate; 2 Decorative Plates; 4 Hex Cap Nuts; (4) 3/8 H-Bolt; (4) 3-3/4 in. OWT Timber Screws
- Fits all standard 8x8 in. from 7-1/2 in. up to 8 in. square
- Includes hardware for attaching base to post for standard installations
- 3/16 in. thick hot Dipped galvanized and powder coated steel
- Recommended for pergolas, decks, veranda posts, pavilions, arbors, and railings



CA Prop 65
PDF

CA Residents:  **Prop 65 Warning(s)** [↗](#)

SPECIFICATIONS

Actual Weight (lbs.)	7.5
Actual Depth (Inches)	9
Stainable/Paintable	×
CA Residents: Prop 65 Warning(s)	 Prop 65 WARNING(S)
Contact Type Allowed	N/A

Common Measurement (T x W)	8-in x 8-in
Type	Post base hardware
Finish	Powder-coated
Manufacturer Color/Finish	Black

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REVIEWS



Be the first to leave a review



OZCO 8-in x 8-in Powder-coated Wood To Wood Post Base Hardware

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0 Questions

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Powder-coated Wood
To Wood Post Base
Hardware

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OZCO 8-in x 8-in Powder-coated Wood
To Wood Post Base Hardware

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OZCO 4-in x 4-in Powder-coated Wood To Wood Post Base Hardware



OZCO 6-in x 6-in Powder-coated Wood To Wood Post Base Hardware



OZCO 4-in x 4-in Powder-coated Wood To Wood Post Base Hardware

OZCO 5-in x 5-in Wood To Wood

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\$10.98

★★★★★ 250

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TITE-SEAL Self-adhesive waterproof flashing tape 4-in x 33-ft Rubberized Asphalt Roll Flashing

Item #124018 Model #TS433

Self-adhesive waterproof flashing tape eliminates air and moisture leaks around windows and doors

Self-seals around fasteners and screws

Keeps out wind driven rain

— +
Qty

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Available

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TITE-SEAL Self-adhesive waterproof
flashing tape 4-in x 33-ft Rubberized
Asphalt Roll Flashing

\$10.98

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preventing mold, and saving energy by stopping air leaks and eliminating drafts. Just cut to fit, remove release paper, and press in place for an instant waterproof seal.

- Self-adhesive waterproof flashing tape eliminates air and moisture leaks around windows and doors
- Self-seals around fasteners and screws
- Keeps out wind driven rain
- Helps prevent the formation of mold and mildew
- Saves energy - stop your heating and cooling dollars from leaking out around windows

SPECIFICATIONS

Series Name	Self-adhesive waterproof flashing tape	Actual Width (Inches)	4
For Use with Decks	×	UNSPSC	30151600
For Use with Chimneys	×	For Use with Pipes	×
For Use with	×	Material	Rubberized asphalt
For Use with	✓	For Use with Gutters	×

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TITE-SEAL Self-adhesive waterproof flashing tape 4-in x 33-ft Rubberized Asphalt Roll Flashing

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when you spend \$299 – \$998.99.

or

18 Months
Special Financing**
when you spend \$999 – \$1,998.99.

or

24 Months
Special Financing**
when you spend \$1,999 or more.



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TITE-SEAL Self-adhesive waterproof flashing tape 4-in x 33-ft Rubberized Asphalt Roll Flashing

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TITE-SEAL Self-adhesive waterproof flashing tape 4-in x 33-ft Rubberized Asphalt Roll Flashing

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The Home Depot Special Order Quote

Customer Agreement #: H6988-155709

Printed Date: 4/7/2021

Customer: JOSE SANCHEZ VARGAS

Address: 21375 US HWY 281 S
SAN ANTONIO, TX 78264

Phone 1: 210-833-9636

Phone 2: 210-833-9636

Email: GRASSHOPPERSJLS@YAHOO.COM

Store: 6988

Associate: STACY

Address: 3111 SE MILITARY
SAN ANTONIO, TX 78223

Phone: 210-359-7000

Pre-Savings Total: \$4,451.08

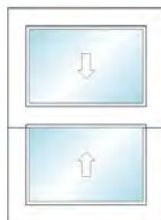
Total Savings: (\$0.00)

Pre-Tax Price: \$4,451.08

All prices are subject to change. Customer is responsible for verifying product selections. The Home Depot will not accept returns for the below products.



Catalog Version 106



Frame Width = 23 1/4"

Frame Height = 32"

Sash Split = Even Divide

Line Number	Item Summary	Was Price	Now Price	Quantity	Total Savings	Total Price
100-1	23.25-in x 32-in Wood W-2500 Double Hung	\$521.51	\$521.51	1	\$0.00	\$521.51
Unit 100 Total:		\$521.51	\$521.51		\$0.00	\$521.51

Begin Line 100 Description

---- Line 100-1 ----

Wood W-2500,
Double Hung,
,
23.25 x 32
Assembly = Full Unit,
Exterior Trim Type = No Exterior Trim,
Exterior Trim Options = No,
Regional Compliance = US National-WDMA/ASTM
Vent Division = Even Divide,
Order By = Rough Opening Size,
Rough Opening Width = Custom Size,
Custom Rough Opening Width = 24,
Rough Opening Height = Custom Size,
Custom Rough Opening Height = 32.75
Species = Auralast Pine,
Interior Finish Type = Natural,
Finish - Interior = Natural,
Finish - Exterior = Natural Pine,
Sash to Match Exterior Finish = Yes,
Finish - Sash (Exterior) = Natural Pine
Jamb Width = 4 9/16"

Rating = PG 25,
Sill Nosing = Standard Sill Nosing,
Sill Horns = Extended Nosing(Beyond Frame),
Sill Horn Length = 2,
Prep for Stool = No
Hardware Finish - Interior = Oil Rub Bronze,
Number of Locks = 1,
Screen Options = No Screen
Energy Efficiency = Energy Star,
Energy Star Zone = Energy Star - Southern,
STC / OITC Rating = Standard,
Glazing = Insulated,
Glass Color = Low-E 366,
Glass Type = Annealed,
Neat Glass = No,
Glass Thickness = Standard Default Thickness,
Protective Film = No Protective Film,
Spacer Color = Black Spacer,
Glass Options = Argon
Grid Type = No Grids

Certification = None,
Jambliner = White Jambliner,
Jamb Liner Options = Compression Jambliner,
Sill Stop = Sill Stop Applied,
Sash Limiter = No Sash Limiter,
Finger Plows = Plow in Top & Bottom Rail
Window Egress = Does Not Meet Egress
U-Factor = 0.29,
Solar Heat Gain Coefficient = 0.2,
Visible Light Transmittance = 0.47,
Condensation Resistance = 59,
CPD# = JEL-N-578-01933-00001
Room Location = ,
Is This a Remake = No,
Specific Information =
Manufacturer = JELD-WEN, Rantoul(IL),
Contact Number = 1-800-246-9131 Option 2,
Catalog Version Date = 02/23/2021,
Catalog Version = 21.1.8.2
None

End Line 100 Description



Catalog Version 106



Frame Width = 35 3/8"
Frame Height = 48 1/2"
Sash Split = Even Divide

Line Number	Item Summary	Was Price	Now Price	Quantity	Total Savings	Total Price
200-1	35.375-in x 48.5-in Wood W-2500 Double Hung	\$412.80	\$412.80	1	\$0.00	\$412.80
Unit 200 Total:		\$412.80	\$412.80		\$0.00	\$412.80

Begin Line 200 Description

---- Line 200-1 ----

Wood W-2500,
Double Hung,
,
35.375 x 48.5
Assembly = Full Unit,
Exterior Trim Type = No Exterior Trim,
Exterior Trim Options = No,
Regional Compliance = US National-WDMA/ASTM
Vent Division = Even Divide,
Order By = Rough Opening Size,
Rough Opening Width = 36 1/8",
Rough Opening Height = 49 1/4"
Species = Auralast Pine,
Interior Finish Type = Natural,
Finish - Interior = Natural,
Finish - Exterior = Natural Pine,
Sash to Match Exterior Finish = Yes,
Finish - Sash (Exterior) = Natural Pine
Jamb Width = 4 9/16"
Rating = PG 25,

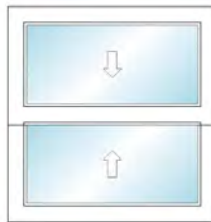
Sill Nosing = Standard Sill Nosing,
Sill Horns = Extended Nosing(Beyond Frame),
Sill Horn Length = 2,
Prep for Stool = No
Hardware Finish - Interior = Oil Rub Bronze,
Number of Locks = 2,
Screen Options = No Screen
Energy Efficiency = Energy Star,
Energy Star Zone = Energy Star - Southern,
STC / OITC Rating = Standard,
Glazing = Insulated,
Glass Color = Low-E 366,
Glass Type = Annealed,
Neat Glass = No,
Glass Thickness = Standard Default Thickness,
Protective Film = No Protective Film,
Spacer Color = Black Spacer,
Glass Options = Argon
Grid Type = No Grids
Certification = None,

Jambliner = White Jambliner,
Jamb Liner Options = Compression Jambliner,
Sill Stop = Sill Stop Applied,
Sash Limiter = No Sash Limiter,
Finger Plows = Plow in Top & Bottom Rail
Window Egress = Does Not Meet Egress
U-Factor = 0.29,
Solar Heat Gain Coefficient = 0.2,
Visible Light Transmittance = 0.47,
Condensation Resistance = 59,
CPD# = JEL-N-578-01933-00001
Room Location = ,
Is This a Remake = No,
Specific Information =
Manufacturer = JELD-WEN, Rantoul(IL),
Contact Number = 1-800-246-9131 Option 2,
Catalog Version Date = 02/23/2021,
Catalog Version = 21.1.8.2
None

End Line 200 Description



Catalog Version 106



Frame Width = 35 3/8"
Frame Height = 36 1/2"
Sash Split = Even Divide

Line Number	Item Summary	Was Price	Now Price	Quantity	Total Savings	Total Price
300-1	35.375-in x 36.5-in Wood W-2500 Double Hung	\$367.19	\$367.19	1	\$0.00	\$367.19
Unit 300 Total:		\$367.19	\$367.19		\$0.00	\$367.19

Begin Line 300 Description

---- Line 300-1 ----

Wood W-2500,
Double Hung,
,
35.375 x 36.5
Assembly = Full Unit,
Exterior Trim Type = No Exterior Trim,
Exterior Trim Options = No,

Sill Nosing = Standard Sill Nosing,
Sill Horns = Extended Nosing(Beyond Frame),
Sill Horn Length = 2,
Prep for Stool = No
Hardware Finish - Interior = Oil Rub Bronze,
Number of Locks = 2,
Screen Options = No Screen

Jambliner = White Jambliner,
Jamb Liner Options = Compression Jambliner,
Sill Stop = Sill Stop Applied,
Sash Limiter = No Sash Limiter,
Finger Plows = Plow in Top & Bottom Rail
Window Egress = Does Not Meet Egress
U-Factor = 0.29,

Regional Compliance = US National-WDMA/ASTM
 Vent Division = Even Divide,
 Order By = Rough Opening Size,
 Rough Opening Width = 36 1/8",
 Rough Opening Height = 37 1/4"
 Species = Auralast Pine,
 Interior Finish Type = Natural,
 Finish - Interior = Natural,
 Finish - Exterior = Natural Pine,
 Sash to Match Exterior Finish = Yes,
 Finish - Sash (Exterior) = Natural Pine
 Jamb Width = 4 9/16"
 Rating = PG 25,

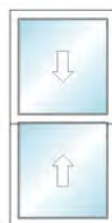
Energy Efficiency = Energy Star,
 Energy Star Zone = Energy Star - Southern,
 STC / OITC Rating = Standard,
 Glazing = Insulated,
 Glass Color = Low-E 366,
 Glass Type = Annealed,
 Neat Glass = No,
 Glass Thickness = Standard Default Thickness,
 Protective Film = No Protective Film,
 Spacer Color = Black Spacer,
 Glass Options = Argon
 Grid Type = No Grids
 Certification = None,

Solar Heat Gain Coefficient = 0.2,
 Visible Light Transmittance = 0.47,
 Condensation Resistance = 59,
 CPD# = JEL-N-578-01933-00001
 Room Location = ,
 Is This a Remake = No,
 Specific Information =
 Manufacturer = JELD-WEN, Rantoul(IL),
 Contact Number = 1-800-246-9131 Option 2,
 Catalog Version Date = 02/23/2021,
 Catalog Version = 21.1.8.2
 None

End Line 300 Description



Catalog Version 106



Frame Width = 35 3/8"
 Frame Height = 72 1/2"
 Sash Split = Even Divide

Line Number	Item Summary	Was Price	Now Price	Quantity	Total Savings	Total Price
400-1	35.375-in x 72.5-in Wood W-2500 Double Hung	\$491.51	\$491.51	4	\$0.00	\$1,966.04
Unit 400 Total:		\$491.51	\$491.51		\$0.00	\$1,966.04

Begin Line 400 Description

---- Line 400-1 ----

Wood W-2500,
 Double Hung,
 ,
 35.375 x 72.5
 Assembly = Full Unit,
 Exterior Trim Type = No Exterior Trim,
 Exterior Trim Options = No,
 Regional Compliance = US National-WDMA/ASTM
 Vent Division = Even Divide,
 Order By = Rough Opening Size,
 Rough Opening Width = 36 1/8",
 Rough Opening Height = 73 1/4"
 Species = Auralast Pine,
 Interior Finish Type = Natural,
 Finish - Interior = Natural,
 Finish - Exterior = Natural Pine,
 Sash to Match Exterior Finish = Yes,
 Finish - Sash (Exterior) = Natural Pine
 Jamb Width = 4 9/16"
 Rating = PG 25,

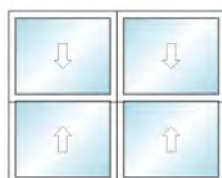
Sill Nosing = Standard Sill Nosing,
 Sill Horns = Extended Nosing(Beyond Frame),
 Sill Horn Length = 2,
 Prep for Stool = No
 Hardware Finish - Interior = Oil Rub Bronze,
 Number of Locks = 2,
 Screen Options = No Screen
 Energy Efficiency = Energy Star,
 Energy Star Zone = Energy Star - Southern,
 STC / OITC Rating = Standard,
 Glazing = Insulated,
 Glass Color = Low-E 366,
 Glass Type = Annealed,
 Neat Glass = No,
 Glass Thickness = Standard Default Thickness,
 Protective Film = No Protective Film,
 Spacer Color = Black Spacer,
 Glass Options = Argon
 Grid Type = No Grids
 Certification = None,

Jambliner = White Jambliner,
 Jamb Liner Options = Compression Jambliner,
 Sill Stop = Sill Stop Applied,
 Sash Limiter = No Sash Limiter,
 Finger Plows = Plow in Top & Bottom Rail
 Window Egress = Meets 5.7 sqft Egress (All Floors)
 U-Factor = 0.29,
 Solar Heat Gain Coefficient = 0.2,
 Visible Light Transmittance = 0.47,
 Condensation Resistance = 59,
 CPD# = JEL-N-578-01933-00001
 Room Location = ,
 Is This a Remake = No,
 Specific Information =
 Manufacturer = JELD-WEN, Rantoul(IL),
 Contact Number = 1-800-246-9131 Option 2,
 Catalog Version Date = 02/23/2021,
 Catalog Version = 21.1.8.2
 None

End Line 400 Description



Catalog Version 106



Overall Frame Width = 90 3/4"
 Overall Frame Height = 72 1/2"
 A1: Sash Split = Even Divide
 B1: Sash Split = Even Divide

Line Number	Item Summary	Was Price	Now Price	Quantity	Total Savings	Total Price
500-1	90.75-in x 72.5-in Wood W-2500 2 Double Hung	\$1,183.54	\$1,183.54	1	\$0.00	\$1,183.54
Unit 500 Total:		\$1,183.54	\$1,183.54		\$0.00	\$1,183.54

Begin Line 500 Description

---- Line 500-1 ----

Wood W-2500,
Double Hung,
,
90.75 x 72.5
Unit Sill Stop = Sill Stop Applied
Window Egress = Meets 5.7 sqft Egress (All
Floors)
Room Location = ,
Is This a Remake = No,
Specific Information =
Manufacturer = JELD-WEN, Rantoul(IL),
Contact Number = 1-800-246-9131 Option 2,
Catalog Version Date = 02/23/2021,
Catalog Version = 21.1.8.2
None
Assembly = Full Unit,
Exterior Trim Type = No Exterior Trim,
Exterior Trim Options = No,
Regional Compliance = Non-Certified
Overall Vent Division = Even Divide,
Overall Order By = Rough Opening Size,

Overall Rough Opening Width = 91 1/2",
Overall Rough Opening Height = 73 1/4"
Species = Auralast Pine,
Interior Finish Type = Natural,
Finish - Interior = Natural,
Finish - Exterior = Natural Pine,
Sash to Match Exterior Finish = Yes,
Finish - Sash (Exterior) = Natural Pine
Jamb Width = 4 9/16"
Rating = No Rating,
Sill Nosing = Standard Sill Nosing,
Sill Horns = Extended Nosing(Beyond Frame),
Sill Horn Length = 2,
Prep for Stool = No
Hardware Finish - Interior = Oil Rub Bronze,
Storm/Screen Combo = No Combo,
Screen Options = No Screen
Energy Efficiency = Energy Star,
Energy Star Zone = Energy Star - Southern,
STC / OITC Rating = Standard,

Glazing = Insulated,
Glass Color = Low-E 366,
Glass Type = Annealed,
Neat Glass = No,
Glass Thickness = Standard Default Thickness,
Protective Film = No Protective Film,
Spacer Color = Black Spacer,
Glass Options = Argon
Add Grilles? = No,
Grid Type = No Grids
Mull Assembly = Flat Mull,
Certification = None,
Jambliner = White Jambliner,
Jamb Liner Filler/Cover = Compression Jambliner,
Sash Limiter = No Sash Limiter,
Finger Plows = Plow in Top & Bottom Rail
Vertical,
Factory,
0" thick, 72.5" length

End Line 500 Description



Window & Patio Door Limited Warranty

OUR WARRANTY TO YOU...

JELD-WEN® Products¹ are designed to create lasting value for your home. This warranty is effective for all JELD-WEN window and patio door Products (except United Collection products) manufactured on or after **June 1, 2019** for use in the United States and Canada. Any previous warranties will continue to apply to products manufactured by JELD-WEN prior to this date. For additional information, including care and maintenance instructions, installation instructions, and previous warranties, refer to www.jeld-wen.com or www.jeld-wen.ca.

WHAT THIS WARRANTY COVERS

Except as set forth in the Special Coverages section below, we warrant that if your JELD-WEN Product exhibits a defect in material or workmanship within the time periods from the date of manufacture as specified below, we will, at our option, repair, replace or refund the purchase price of the Product or component part. Skilled labor² (where deemed necessary by us) to repair or replace any component is provided as specified below.

	Wood & Metal Clad Wood	Composite	Vinyl & Metal Clad Vinyl	Aluminum
Basic Product Coverage Owner-Occupied Single-Family Residence	20 years	10 years; glass is covered for 20 years	as long as you own and occupy your residence	10 years
Basic Product Coverage Commercial (Other than Owner-Occupied Single-Family Residence)	20 years	10 years	10 years	2 years
Skilled Labor² Coverage	2 years	2 years	2 years	1 year
Transferability - the maximum length of any coverage when you sell your residence or it becomes occupied by other than the original owner	10 years	10 years	10 years	Non-transferable

Special Coverages (Applies to both Owner-Occupied and Commercial)

The following Special Coverages apply to special product features and options; not all options are available on all products or in all regions.

Glass Options	Coverage	Notes
Triple-Glazed Glass Units	20 years	Includes the glass panes and the insulating seal.
ImpactGard® Glass Units	10 years	
Special Glazings	5 years	Includes laminated glass units other than ImpactGard, and glass options not listed in our product literature, e.g., leaded or decorative glass.
Blinds/Shades Between the Glass	10 years	Includes the seal, external control mechanism, and operation of the shade/blind.
Stress Cracks	1 year	Applies to sealed glass units installed in windows and patio doors. Laminated glass and special glazings are excluded. Coverage includes replacement glass and skilled labor ² necessary to replace the glass. Stress cracks occur when, in the first year after manufacture, the glass develops a crack without sign of impact.
Accidental Glass Breakage	Same as the Basic Product Coverage above (Owner-Occupied or Commercial)	Applies to Products ordered with double-strength or thicker glass. Not covered: damage attributable to acts of nature (e.g. fire, hurricane, etc.), civil disorder, building settling, structural failures of walls or foundations or improper installation, construction job-site mishaps, storage, or handling. Special glazings and ImpactGard glass are not covered by this glass breakage warranty.

Continued on next page

Special Coverages (continued)

Finish Options	Coverage	Notes
Finish on Metal Clad Exteriors	AAMA 2605: 30 years AAMA 2603/2604: 10 years Anodized: 5 years	Coverage is for peeling, checking, cracking, or exhibiting excessive chalk, fade or color change ³ . Clad products installed within one mile of a salt-water source (for example, an ocean or salt lake) or other corrosive environment require additional and specific maintenance requirements. Refer to our full care and maintenance instructions.
Factory Interior Finish on Wood Products	1 year	Coverage is for peeling, checking, or cracking. Should the factory interior finish be proven defective within this time period, we will at our option, replace or refinish the component or product, or offer a refinish credit up to \$50 per opening for windows or \$100 per opening for patio doors. This coverage applies to factory-applied finish coat options only; standard factory-applied primer is not a finish coat.
Colored and Laminated Surfaces on Vinyl and Composite Products	10 years	Coverage is for peeling, blistering, or flaking, and excessive color change ³ . This coverage does not extend to discoloration, polish, surface damage, or alteration caused by the use of natural or chemical solvents or an environmental factor causing such damage.
Other Special Coverages	Coverage	Notes
AuraLast® Protection for Wood Products	Owner-Occupied Single-Family Residence: as long as you own and occupy your residence	Coverage is for wood decay and/or termite damage in pine wood components. Warranty coverage outside Canada, the contiguous 48 states and Alaska is contingent upon approval from the JELD-WEN Customer Care Department. Please contact us.
	Commercial: 20 years	
Custom Fiberglass Door Slabs	As long as you own and occupy your residence	
Factory Prefinish on Custom Fiberglass Doors	10 years	Should the factory prefinish be proven defective, we will at our option refinish the door or pay up to \$350.00 per opening to the current owner.
Electric Operators	1 year	Coverage includes replacement parts and skilled labor necessary to replace the operator for one year.
Retractable Roll Screens	5 years	

HOW TO GET ASSISTANCE

If you have a problem with your JELD-WEN Product, contact the dealer/distributor or contractor from whom you purchased your product or contact us directly:

	In the United States:	In Eastern Canada:	In Western Canada:	In Ontario Canada:
Mail:	JELD-WEN Customer Care Attn: Warranty Claims P.O. Box 1329 Klamath Falls, OR 97601	JELD-WEN Service Dept 90, rue Industrielle Saint-Apollinaire, Quebec, Canada G0S 2E0	JELD-WEN Service Dept 550 Munroe Avenue Winnipeg, Manitoba, Canada R2K 4H3	JELD-WEN Service Dept 90 Stone Ridge Road Vaughan, Ontario Canada L4H 3G9
Phone:	888-JWHelpU 888-594-3578	800-463-1930	888-945-5627 204-668-8230	800-440-2714 905-265-5700
Fax:	800-436-5954	888-998-1599	204-663-1072	905-265-5704
E-mail:	jeldwenwarranty@jeld-wen.com		wpgservice@jeld-wen.com	
Web:	www.jeld-wen.com/contact-us	www.jeld-wen.ca/contact-us		

We can respond quickly and efficiently if you provide the following: a) product identification (from the original order/invoice, spacer code, permanent label, or the window identification number found on corner of glass), b) how to contact you, c) the address where the product can be inspected, and d) a description of the apparent problem and the product (photographs are helpful).

What We Will Do...

Upon receiving your notification, we will send out an acknowledgement within three business days to the contact, which you have provided. We will investigate your claim and will begin to take appropriate action within 30 days after receipt of notification. If your warranty claim is denied, we may charge an inspection fee for an onsite inspection that is required or requested by you.

Continued on next page

HOW TO GET ASSISTANCE (CONTINUED)

If your claim is approved, and we choose to repair or replace the product or a component of the product, the replacement product/component will be provided in the same specification as the original product or its nearest equivalent current product. Replacement components/products are warranted for the balance of the original product warranty or 90 days, whichever is longer.

Product Purchase Date: _____
Order Number: _____

If the claimed nonconformity is warp of a door slab, we may defer repairing or replacing the door slab for a period up to twelve (12) months from the date of claim. It is not uncommon for a temporary warp condition to occur as the door slab adjusts to local humidity and temperature conditions. This deferral will not be counted against the warranty period.

WHAT THIS WARRANTY DOES NOT COVER

JELD-WEN is not liable for damage, product failure or poor product performance due to:

- Normal wear and tear, including normal wear and tear of weatherstrip; natural weathering of surfaces. Variance in color or texture of natural wood parts, and natural tarnishing of copper cladding are not considered defects.
- Normal wear and tear to hardware and naturally occurring changes to hardware finishes (e.g., corrosion or tarnishing).
- Exposure to chemicals (e.g. brick wash) or a harsh environment (e.g. salt spray or airborne pollutants) unless otherwise stated above.
- Misuse, abuse or failure to properly finish and provide maintenance.
- Alteration or modification of the Product (e.g. customer applied tints or films, paint finishes, security systems).
- Any cause beyond the reasonable control of JELD-WEN (e.g. fire, flood, earthquake, other acts of nature, and acts of third parties outside of our control).
- Failure to provide an adequate overhang for fiberglass doors; damage caused by extreme temperature buildup where storm doors are present. For general guidelines, see our "Appropriate Protection for Exterior Doors" in our product literature or at www.jeld-wen.com/resources; for specific information pertaining to your structure, consult your contractor or other building professional.
- Improper installation not in conformance with JELD-WEN installation instructions (note: see www.jeld-wen.com for current installation instructions); operational problems and problems related to water and/or air infiltration/leaking as a result of improper installation or flaws in building design or construction.
- Installation into a condition that exceeds product design standards and/or certified performance specifications and/or is not in compliance with building codes.
- Extreme artificial temperature buildup or exposure (e.g., where storm doors/windows are present).
- Hardware or inserts that are not provided by us, such as locksets, door handles, strikes, etc.
- Condensation or damage as a result of condensation (Note: unless due to insulating glass failure, most condensation problems are related to excessive humidity levels in a structure. Contact a heating/air conditioning specialist for help).

- Wood decay in wood components other than of pine species and any components (including pine) that come in direct contact with soil. Note: superficial mold/mildew does not indicate wood decay.

JELD-WEN is also not liable for:

- Glass breakage (except as specifically covered above).
- Screen damage due to normal wear and tear, misuse, abuse, or insect or animal activity.
- Slight expansion or contraction of product components due to varying environmental conditions; slab movement (shrinkage or swelling) of 1/4" or less due to temperature and humidity, consult the Homeowner's Manual on how to work with this natural movement.
- Slight imperfections or wavy distortions in the glass that don't impair structural integrity. Note: wavy distortions in the glass (e.g. related to laminate interlayer or heat strengthening of glass) are not considered a defect. Slight color variations in glass are not considered a defect.
- Hairline cracks in factory-applied finishes; surface cracks that do not compromise the underlying material are not a defect.
- Damage or distortion to other property, including but not limited to, vinyl siding, building components or landscaping caused in whole or in part by reflection of light or heat from JELD-WEN windows or doors.
- Product or component performance decline due to aging, inert gas dissipation, natural processes or failure to provide proper maintenance. Note: Other than inert gas loss due to seal failure, the migration of an inert gas, such as argon, is a natural process that occurs over time and is not a defect.
- Repairs on product not accessible by road; travel costs related to repairs on product located more than 125 miles/200 kilometers from an authorized dealer; providing, assembling, or dismantling scaffolding, lifts, or other specialized equipment.
- Labor and materials for repainting or refinishing activities or the removal or disposal of defective product(s); labor exceeding the time periods specified above.
- Incidental or consequential damage. Some states/provinces do not allow the exclusion or limitation of incidental or consequential damages, so this may not apply to you.

Continued on next page

Important Legal Information -- Please read this carefully. It affects your rights.

This Limited Warranty document sets forth our maximum liability for our products. We shall not be liable for special, indirect, consequential, or incidental damages. Your sole and exclusive remedy with respect to any and all losses or damages resulting from any cause whatsoever shall be as specified above. We make no other warranty or guarantee, either express or implied, including implied warranties of merchantability and fitness for a particular purpose to the original purchaser or to any subsequent user of the Product, except as expressly contained herein. In the event state or provincial law precludes exclusion or limitation of implied warranties, the duration of any such warranties shall be no longer than, and the time and manner of presenting any claim thereon shall be the same as, that provided in the express warranty stated herein. This Limited Warranty document gives you specific legal rights, and you may have other rights that vary from state/province to state/province.

Any dispute, controversy or claim arising out of or relating to this warranty, any alleged breach thereof, or the use or sale of the products to which this warranty applies shall be resolved by mandatory and binding arbitration administered by the American Arbitration Association in accordance with its commercial arbitration rules. Any ensuing arbitration will be venued in Charlotte, North Carolina. Original purchaser agrees that they may assert claims against JELD-WEN in their individual capacity only, and not as a plaintiff or class member in any purported class action proceeding. This warranty shall be interpreted in accordance with the laws of North Carolina (excluding North Carolina's conflict of laws principles). If any provision of this warranty is deemed illegal or unenforceable in a judicial proceeding, that provision shall be severed and excluded, and the remainder of this warranty shall continue in force. Rejection of these dispute resolution provisions must be sent to JELD-WEN at the address provided herein within thirty (30) days of original purchaser's receipt of the Products to which this warranty applies.

No distributor, dealer or representative of JELD-WEN has the authority to change, modify or expand this warranty. The original purchaser of this Product acknowledges that they have read this warranty, understand it and are bound by its terms and agrees to provide this warranty to the original owner of the structure into which the Product is installed.

¹ "JELD-WEN Products" shall refer to window and patio door products (except United Collection products) manufactured in the United States and/or Canada and marketed under the JELD-WEN brand name for use in the United States and/or Canada. See our separate United Collection warranty, or our Export Warranty for applicable coverage on products used outside the United States and Canada.

² "Skilled labor" refers to tasks where specialized technical knowledge, experience, methods or tools are required to properly identify, diagnose and/or correct product-related issues.

³ "Chalking" of the exterior finish is not a defect unless it exceeds a numerical rating of eight (8) when measured in accordance with the standard procedures specified in ASTM D4214. Fading or changing in color of the exterior finish is not a defect unless it exceeds five (5) E units, calculated in accordance with ASTM D2244, paragraph 6.2. Color change shall be measured on an exposed area of finish that has been cleaned of surface soils and chalk, and the corresponding values measured on the original or unexposed area of finish. Fading or color changes may not be uniform if the surfaces are not equally exposed to the sun and elements. If the above ASTM standards change, the standard in effect at the time of purchase applies. As an option to replacement, we may choose to refinish the product.