

ENLIGHTENED LIVING



WWW.WASCOPRODUCTS.COM

Since 1935
Wasco[®]
SKYLIGHTS

- ▲ RESIDENTIAL SKYLIGHTS
- ▲ E-CLASS
- ▲ CURB-MOUNT
- ▲ ARCHITECTURAL SERIES



Thank you for your interest in Wasco Product, Inc. Wasco Products offers a diverse product line including residential glass and acrylic glazed skylights and patio doors. Enclosed is the residential products dealer binder. This will provide you with the tools you need for selling Wasco skylight solutions.

Wasco has been manufacturing building material related products for over 70 years. Our emphasis has always been on innovative, distinctive, premium quality products that will provide our customers with years of trouble free performance.

We hope you will enjoy browsing through the enclosed information. If you have a chance, visit our website at www.wascoproducts.com or email us at sales@wascoproducts.com.

If you have any questions or need further information, please contact us at 1-800-388-0293. We welcome your inquiry and will be happy to assist you.

Thank you,

A handwritten signature in black ink, appearing to read 'Jeff Frank', is written in a cursive style.

Jeff Frank
CEO, Wasco Skylights



Wasco Products, Inc. – A Brief History

The Wasco Flashing Company was founded by Max Wasserman in 1935 in Cambridge, Massachusetts to manufacture a revolutionary through wall flashing system. Following World War II, Wasco focused on new applications for the use of acrylic sheet. In 1949 the company developed an acrylic bubble skylight, and in 1951 the Wascolite Skydome® was introduced, an aesthetically pleasing and practical method of admitting natural daylight into the growing market of one story schools and other institutional, industrial and residential buildings. In 1955 Wasco introduced the Pyrodome® and the Pyrovent®, providing roof access, ventilation and fire venting. The 1950s also witnessed the development of new manufacturing technologies, a national network of manufacturer representatives, and recognition by the architectural community, which specified Wasco's products in their designs.

In 1956, Wasco moved its growing skylight and acrylic sheet production operations to Sanford, Maine, and in 1961, American Cyanamid purchased the company. In response to an expressed need by a skylighting and flashing operations, renamed his company Wasco Products, Inc., and began renovations to a building which is part of the historic Goodall-Sanford Mills complex, where the company remains today.

Wasco responded to the energy crisis of the 1970s with the development of thermally efficient skylighting, introducing the Solar Energy Skydome® and the Thermalized Skywindow®. In 1974, Wasco introduced the first in its line of aluminum framed, glass glazed skylights initially marketed for the residential market, which was an instant success. The innovative skylight had a Permatherm® frame manufactured of vinyl, a patented weather seal system, a built-in curb for ease of installation, and a variety of glazing options. In 1979, the flashing business was sold to Geoffrey Magnuson, who operates the business today in Sanford as York Manufacturing Company.

The 1980s were a period of unrivaled growth for Wasco. A second manufacturing facility was opened in Ennis, Texas (since closed), the Skywindow® line was expanded to include venting units, and in 1983 Gus Magnuson retired, selling the company to two senior executives and a son, Chris Magnuson. In 1984, Wasco developed a glass glazed, tubular frame system for use in monumental skylighting applications such as malls. In 1989, the division was sold and renamed Architectural Skylight Company. In 1988, Wasco developed the revolutionary E-Class Skywindow® with a patented, one piece, self flashing integral curb/flexible roof flange design. The ease of installation of the E-Class Skywindow® makes it the company's premier residential skylight product.

With the advent of the "new economy" ushered in with the 90's, Wasco experienced its share of streamlining. In addition, in 1994, Wasco introduced its vinyl Rolling Patio door line. This was Wasco's first foray into the "vertical" daylighting product arena.

As of the first quarter of 2001, ownership was consolidated under Chris Magnuson, who also assumed the office of President. It is with a renewed spirit of teamwork and dedication, backed by industry experience second to none, that Wasco eagerly welcomes both the challenges and opportunities of the 21st Century.



Skylights

ENLIGHTENED LIVING



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SKYLIGHTS

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RESIDENTIAL SKYLIGHTS



A NEW LEVEL OF PROFESSIONAL QUALITY FOR THE HOME

At Wasco, we know what builders and their customers are looking for in a skylight. Top quality. Innovative technology. Wide-ranging selection. Trouble-free installation. Reliable long-life performance. Competitive prices. And of course, plenty of daylight.

You get all of that with Wasco skylights. From our advanced E-Class and quality curb-mount skylights, to our spectacular Architectural Series – all in standard as well as custom sizes – there's a Wasco skylight to suit every budget, every design, every lifestyle.



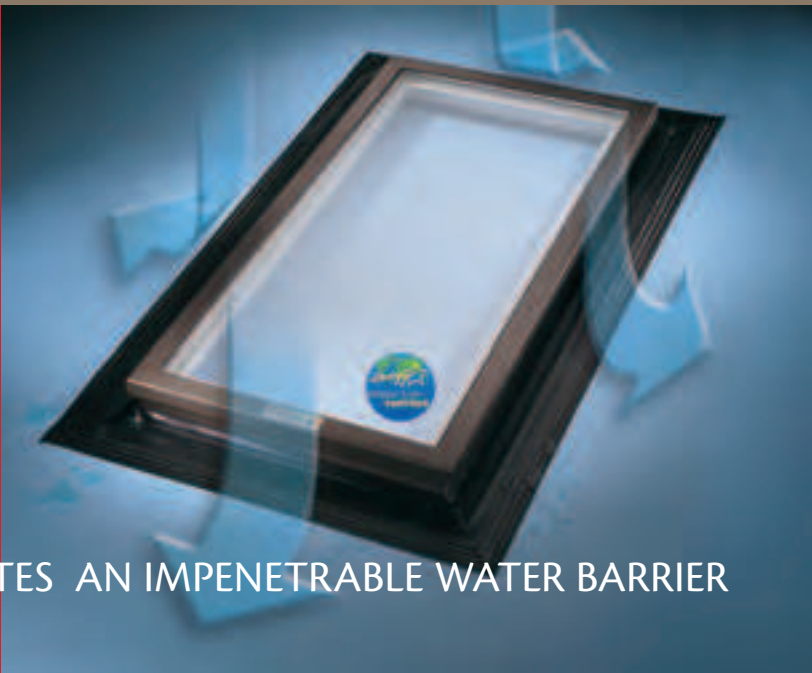
E-CLASS™

THE “MORE SKY” SKYLIGHTS

Our energy-efficient E-Class™ skylights are designed to deliver more light per rough opening, and install in less time than any of the leading brands. Choose either venting or fixed styles, in standard or custom sizes.

NO MASTIC
NO STEP FLASHING
NO SEALANTS

PATENTED "ULTRASEAL™" SYSTEM CREATES AN IMPENETRABLE WATER BARRIER



"With our budget, we want to make sure we can put them in fast and easy, and this is the window that does the job for us. They just drop right in." Tommy Silva, CC, "This Old House"

READY TO GO...



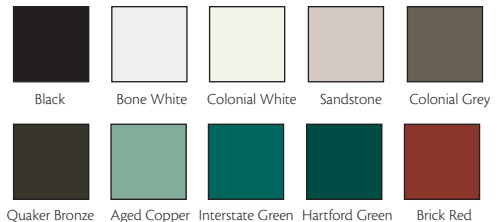
RIGHT OUT OF THE BOX

Our energy-efficient E-Class™ Skylights are designed to install in less time than any of the leading brands. Our one-piece curb-frame/flashing design installs far more quickly and easily than skylights requiring step flashing or mastic.

Finishes

Mill finish aluminum is standard on all Architectural Series models. We also offer anodized and high-performance designer color finishes; our most popular colors are shown below, approximated by printing inks. Copper cladding is available on some units.

AVAILABLE IN DESIGNER COLORS & COPPER CLADDING



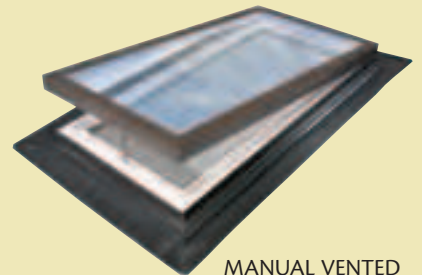


CHOOSE THE BEST SKYLIGHT TO FIT YOUR NEEDS

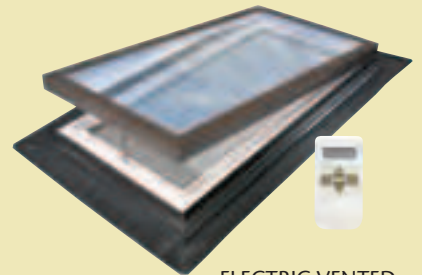
All three styles come in standard or custom sizes.



FIXED



MANUAL VENTED



ELECTRIC VENTED





E-CLASS OPTIONS AND ACCESSORIES

ELECTRONIC REMOTE-CONTROLLED MOTOR

for venting models. Includes rain sensor to automatically close the skylight in bad weather. Any number of skylights, may be controlled from one remote. (Multiple motors required. Please call for details.)

ALUMINIZED PRIVACY PLEATED SKYSHADE™

(for venting or fixed models) mounts in the skylight opening below the glass. Shades have no side rails, maximizing daylight.

WIRELESS REMOTE CONTROL

for motorized SkyShade™ operation.

ALUMINUM TELESCOPIC POLE

(6'2" to 10'4") for manual operation of venting skylights.

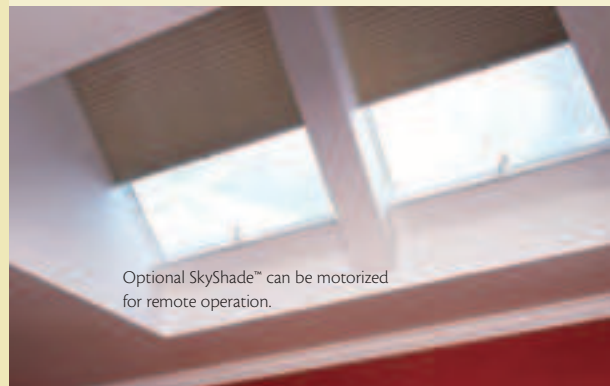
ALUMINUM TELESCOPIC POLE (3' to 6' or 6' to 12') for manual SkyShade™ operation

MORE DAYLIGHT FOR LESS

Our E-Class skylights sit on the deck, giving you a larger glass area per rough opening compared to competitors' skylights. See dimensions and daylight area specs below.

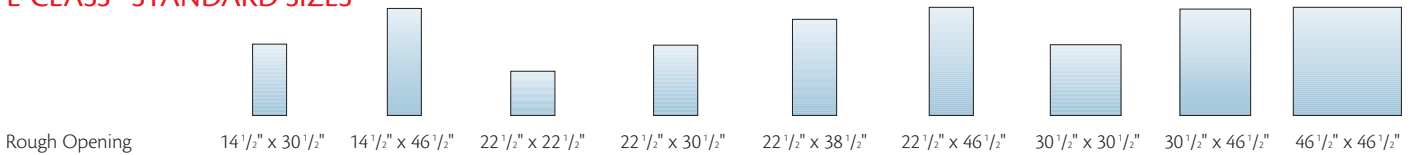
10 YEAR WARRANTY

Wasco skylights' superior design, workmanship, and weathertight performance are backed by a non-prorated, 10 year limited warranty covering materials, insulated glass and workmanship. Ask for details.



Optional SkyShade™ can be motorized for remote operation.

E-CLASS™ STANDARD SIZES



Venting E-Class Skylights

Model No.	N/A	N/A	EV2222	EV2230	EV2238	EV2246	EV3030	EV3046	EV4646
Daylight Area (glass)	N/A	N/A	20 5/8 x 20 5/8	20 5/8 x 28 5/8	20 5/8 x 36 5/8	20 5/8 x 44 5/8	28 5/8 x 28 5/8	28 5/8 x 44 5/8	44 5/8 x 44 5/8
Daylight Sq. Ft. (glass)	N/A	N/A	2.95	4.10	5.25	6.39	5.69	8.87	13.93

Fixed E-Class Skylights

Model No.	EF1430	EF1446	EF2222	EF2230	EF2238	EF2246	EF3030	EF3046*	EF4646
Daylight Area (glass)	13 1/8 x 29 1/8	13 1/8 x 45 1/8	21 1/8 x 21 1/8	21 1/8 x 29 1/8	21 1/8 x 37 1/8	21 1/8 x 45 1/8	29 1/8 x 29 1/8	29 1/8 x 45 1/8	45 1/8 x 45 1/8
Daylight Sq. Ft. (glass)	2.65	4.11	3.09	4.27	5.45	6.62	5.89	9.13	14.14

Mulling Kits are available. Each kit contains materials to mull two units side-by-side with 10" between adjacent rough openings.

*Model EF3046 may also be ordered as EF4630, with the first dimension parallel to the roof ridge.

E-CLASS™ SKYLIGHTS

E-CLASS™ SKYLIGHTS

EVERY DESIGN. EVERY BUDGET. EVERY LIFESTYLE.

CURB-MOUNT SKYLIGHTS

VERSATILE CURB-MOUNTED TECHNOLOGY
THAT'S EASY TO INSTALL, EASY TO LIVE WITH.

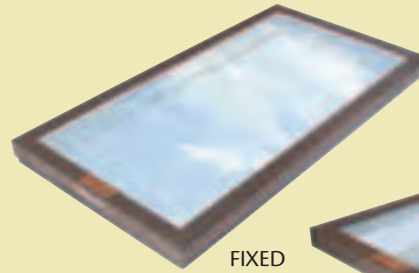


CURB-MOUNT SKYLIGHTS

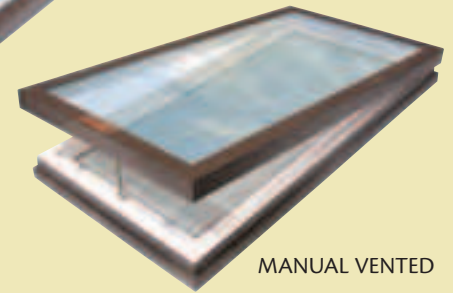
LEAKPROOF, ECONOMICAL SKYLIGHTS FOR CURB-MOUNT APPLICATIONS

- Outstanding performance for tile or metal roofs
- Well-suited to thick roofing materials such as clay tile and concrete
- Rugged, one-piece Permatherm[®] Vinyl Curb reduces thermal conductivity and condensation
- Built-in condensation channel controls indoor moisture in higher humidity areas
- Co-extruded Weather Gasket ensures minimal air infiltration
- Protective aluminum retainer with durable bronze enamel finish
- Economical units using site-built curbs (min. 3 in 12 pitch)
- Integral Nailing Sill for fast and easy installation

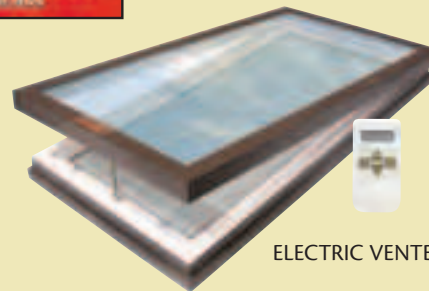
CHOOSE THE BEST CURB-MOUNT SKYLIGHT TO FIT YOUR NEEDS



FIXED



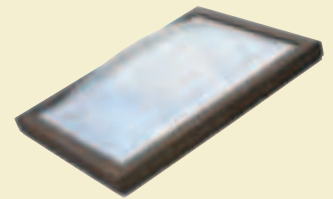
MANUAL VENTED



ELECTRIC VENTED

ALSO AVAILABLE IN A DOMED VERSION

Our Curb-Mount Skylights also comes in a domed version suitable for slate, tile, wood shake, membrane and metal roofing systems. The dome is double-glazed with durable, high molecular density acrylic in your choice of clear or bronze.



CURB-MOUNT STANDARD SIZES

Model Numbers	Rough Opening	Outside Curb Dimensions	Daylight Area	Daylight Opening Sq. Ft.
GS (V, D) 2222	22 1/2" x 22 1/2"	25 1/2" x 25 1/2"	21 1/8" x 21 1/8"	3.09
GS (V, D) 2230	22 1/2" x 30 1/2"	25 1/2" x 33 1/2"	21 1/8" x 29 1/8"	4.27
GS (V, D) 2238	22 1/2" x 38 1/2"	25 1/2" x 41 1/2"	21 1/8" x 37 1/8"	5.45
GS (V, D) 2246	22 1/2" x 46 1/2"	25 1/2" x 49 1/2"	21 1/8" x 45 1/8"	6.61
GS (V, D) 3030	30 1/2" x 30 1/2"	33 1/2" x 33 1/2"	29 1/8" x 29 1/8"	5.89
GS (V, D) 3046	30 1/2" x 46 1/2"	33 1/2" x 49 1/2"	29 1/8" x 45 1/8"	9.12
GS (V, D) 4646	46 1/2" x 46 1/2"	49 1/2" x 49 1/2"	45 1/8" x 45 1/8"	14.14

V=Venting, D=Domed

INNOVATIVE DESIGNS.
SPECTACULAR LOOKS.
IN STANDARD AND CUSTOM SIZES.

ARCHITECTURAL SERIES

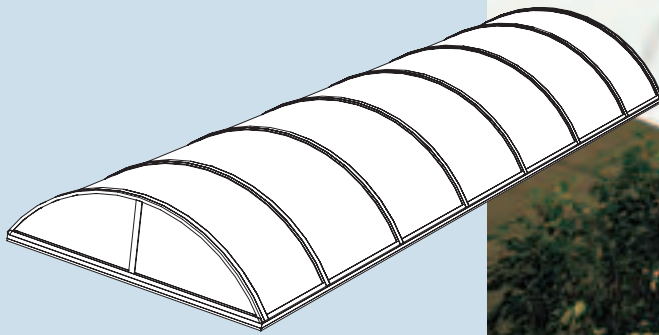
Wasco's award-winning Architectural Series offers lightweight framed residential skylighting systems that give you a custom look at an affordable cost. Choose from our versatile Pyramid Systems in Square, Octagonal and Extended Pyramid Configurations...or our dramatic Planar System for pitched roof applications...both with a full range of glazing options. Or let your imagination go with the acrylic-glazed Arched System for a long, continuous daylighting source...or our 9" high curb deck-mount acrylic Spherical skylights for both pitched and flat roof applications.



ARCHITECTURAL SERIES SKYLIGHTS

ARCHED SYSTEM

Our Arched System creates a curved element for your ceiling design, providing a long and continuous day-lighting source. The system's curb-mount design enables unlimited applications for both flat and pitched roofs, using site-built curbs. The Arched System features a fully-assembled frame double-glazed with durable, high molecular weight acrylic (available in your choice of clear, translucent white or bronze.)



Finishes

Mill finish aluminum is standard on all Architectural Series models. We also offer anodized and high-performance designer color finishes; our most popular colors are shown below, approximated by printing inks. Copper cladding is available on some units.



ARCHED STANDARD SIZES

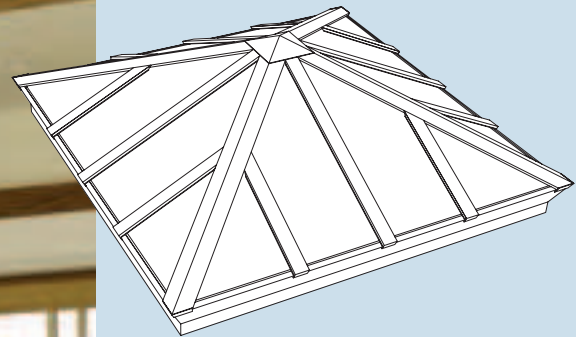
Model No.	O.D. Curb Dimensions		Rib Spacing	Dome Rise
	Width	Length		
AS-30144	2' 9"	12' 0"	4' 0"	8 3/4"
AS-30192	2' 9"	16' 0"	4' 0"	8 3/4"
AS-36144	3' 3"	12' 0"	4' 0"	10 1/4"
AS-36192	3' 3"	16' 0"	4' 0"	10 1/4"
AS-42144	3' 9"	12' 0"	4' 0"	11 3/4"
AS-42192	3' 9"	16' 0"	4' 0"	11 3/4"
AS-48144	4' 3"	12' 0"	4' 0"	13 1/4"
AS-48192	4' 3"	16' 0"	4' 0"	13 1/4"
AS-54144	4' 9"	12' 0"	4' 0"	14 3/4"
AS-54192	4' 9"	16' 0"	4' 0"	14 3/4"

Dimensions are based on a site-built curb of 3 1/2" and a 7/8" gap between the outside of the curb and the counter flashing leg of the skylight frame.



PYRAMID SYSTEMS

Minimize framing and maximize daylight with this lightweight system providing spans of up to 6'6" with pitches of 5, 7, and 12 on 12. Curb-mount design using site-built curbs enables unlimited applications on both pitched and flat roofs. Available in Square Pyramid, Octagonal Pyramid, and Extended Pyramid configurations. The thermally-broken aluminum frame ships assembled and ready for field glazing. See charts for standard sizes. Please contact us for custom sizes and other options.



SQUARE PYRAMID STANDARD SIZES

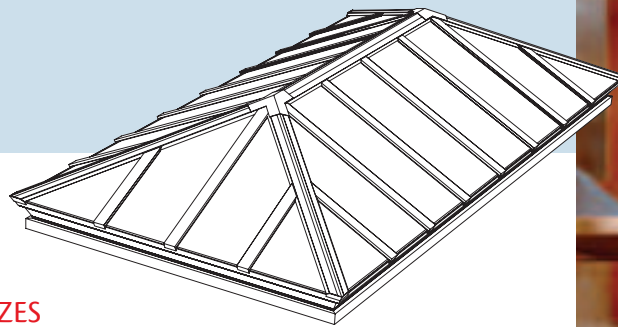
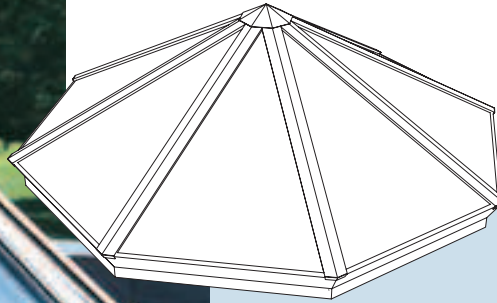
Model No.	O.D. Curb	Rough Opening ¹
SPY-3636	3' 0"	2' 5"
SPY-4242	3' 6"	2' 11"
SPY-4848	4' 0"	3' 5"
SPY-5454	4' 6"	3' 11"
SPY-6060	5' 0"	4' 5"
SPY-6666	5' 6"	4' 11"
SPY-7272	6' 0"	5' 5"
SPY-7878	6' 6"	5' 11"
SPY-8080	6' 8"	6' 1"

ARCHITECTURAL SERIES SKYLIGHTS



OCTAGONAL PYRAMID STANDARD SIZES

Model No.	O.D. Curb Width	Rough Opening ¹	Curb Segment
OPY-4848	4' 0"	3' 5"	1' 7 1/8"
OPY-5454	4' 6"	3' 11"	1' 10 3/8"
OPY-6060	5' 0"	4' 5"	2' 0 3/8"
OPY-6666	5' 6"	4' 11"	2' 3 5/16"
OPY-7272	6' 0"	5' 5"	2' 5 13/16"
OPY-8080	6' 8"	6' 1"	2' 9 1/8"



EXTENDED PYRAMID STANDARD SIZES

Model No.	Outside Curb Dimensions							
	Width	Lengths*						
EPY-36	3' 0"	4' 0"	6' 0"	8' 0"	10' 0"	12' 0"	14' 0"	16' 0"
EPY-42	3' 6"	6' 0"	8' 0"	10' 0"	12' 0"	14' 0"	16' 0"	
EPY-48	4' 0"	6' 0"	8' 0"	10' 0"	12' 0"	14' 0"	16' 0"	
EPY-54	4' 6"	6' 0"	8' 0"	10' 0"	12' 0"	14' 0"	16' 0"	
EPY-60	5' 0"	6' 0"	8' 0"	10' 0"	12' 0"	14' 0"	16' 0"	

* Please indicate desired length when placing orders.



ARCHITECTURAL SERIES SKYLIGHTS



PLANAR SYSTEM

Developed for pitched roof applications, the Wasco Planar System is an aluminum-frame glass system that lays over roof rafters, creating a narrow line frame for a clean and appealing look on the roofline. Available in curb-mount or self-flashing deck-mount, the system accommodates multiple insulated glass panels. Thermally-broken aluminum frame ships assembled and ready for field glazing. High performance insulated glass options are available for energy efficient thermal performance and solar control.

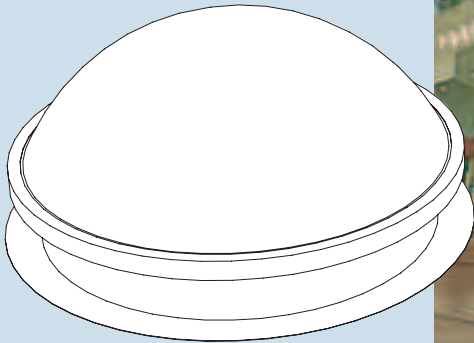
PLANAR STANDARD SIZES (CURB-MOUNT OR DECK-MOUNT)

	Model	O.D. Curb		Rough Opening		No. Glass Panels
		Width	Length	Width ¹	Height ¹	
	2448	2' 1 1/2"	4' 1 1/2"	1' 10 1/2"	3' 10 1/2"	1
	2472	2' 1 1/2"	6' 1 1/2"	1' 10 1/2"	5' 10 1/2"	1
	4848	4' 1 1/2"	4' 1 1/2"	3' 10 1/2"	3' 10 1/2"	2
2' 0"	4872	4' 1 1/2"	6' 1 1/2"	3' 10 1/2"	5' 10 1/2"	2
Rafter	7248	6' 1 1/2"	4' 1 1/2"	5' 10 1/2"	3' 10 1/2"	3
Spacing	7272	6' 1 1/2"	6' 1 1/2"	5' 10 1/2"	5' 10 1/2"	3
	9648	8' 1 1/2"	4' 1 1/2"	7' 10 1/2"	3' 10 1/2"	4
	9672	8' 1 1/2"	6' 1 1/2"	7' 10 1/2"	5' 10 1/2"	4
	12048	10' 1 1/2"	4' 1 1/2"	9' 10 1/2"	3' 10 1/2"	5
	12072	10' 1 1/2"	6' 1 1/2"	9' 10 1/2"	5' 10 1/2"	5
	3248	2' 9 1/2"	4' 1 1/2"	2' 6 1/2"	3' 10 1/2"	2
	3272	2' 9 1/2"	6' 1 1/2"	2' 6 1/2"	5' 10 1/2"	2
1' 4"	6448	5' 5 1/2"	4' 1 1/2"	5' 2 1/2"	3' 10 1/2"	4
Rafter	6472	5' 5 1/2"	6' 1 1/2"	5' 2 1/2"	5' 10 1/2"	4
Spacing	9648	8' 1 1/2"	4' 1 1/2"	7' 10 1/2"	3' 10 1/2"	6
	9672	8' 1 1/2"	6' 1 1/2"	7' 10 1/2"	5' 10 1/2"	6
	12848	10' 9 1/2"	4' 1 1/2"	10' 6 1/2"	3' 10 1/2"	8
	12872	10' 9 1/2"	6' 1 1/2"	10' 6 1/2"	5' 10 1/2"	8

ARCHITECTURAL SERIES SKYLIGHTS

SPHERICAL DOME

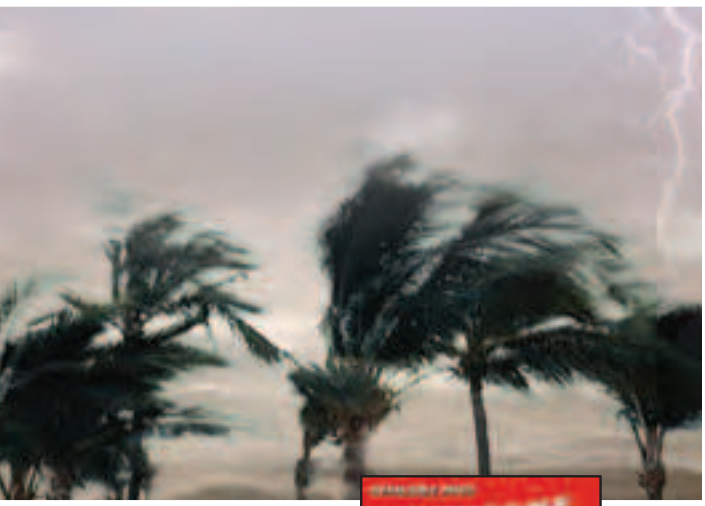
Wasco's Spherical models allow you to offer the dramatic look, function, and quality of custom daylighting at a cost that won't break the budget. Available in a standard 9" high curb deck mount configuration, our Spherical skylights may be used with a variety of roofing materials for both pitched and flat roof applications. The fully assembled frame is double-glazed with durable, high molecular weight acrylic (available in your choice of clear, translucent white or bronze.)



SPHERICAL DOME STANDARD SIZES

Model	Rough Opening	Dome Rise
SU9-30	2' 0"	8"
SU9-36	2' 7"	11"
SU9-48	3' 7"	13"
SU9-60	4' 6"	19"
SU9-72	5' 7"	22"
SU9-84	6' 7"	25"
SU9-96	7' 7"	29"

HURRICANE RESISTANT SKYLIGHTS



WASCO® PRODUCTS – THE LARGEST SELECTION OF HURRICANE-RESISTANT SKYLIGHTS AVAILABLE IN THE U.S. MARKET

Wasco® Skylights in hurricane-resistant glazing, provides superior safety and security that meets Dade County, IBC/IRC and other stringent state building codes for skylights installed in Wind Zone 3 coastal applications.

Available for fixed E-Class, G-Series and Architectural Series models, hurricane-resistant glass appears to be ordinary glass, but shields against damage from wind-borne debris, accidental impacts, forced entry and even unwanted noise.

Wasco uses hurricane-resistant insulating glass made of heat strengthened low-E lites permanently bonded with one or more layers of durable PVB (polyvinyl butyral) resin sheeting. In exhaustive impact tests, broken glass fragments have adhered to the bonded plastic vinyl interlayer, reducing the risk of injury, shattered glass and breaching the building envelope.

For more information, visit www.wascoproducts.com/hurricaneresistant.asp

The New GSHR Curb Mount series is Miami-Dade Product Control approved, NOA #04-0728.03.



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Fax: 207-490-5270
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www.wascoproducts.com

L026



Call 800-388-0293 for our binder

For more information and to see our full line of residential and commercial skylight products, please visit us online at www.wascoproducts.com

Safety Considerations

Wasco skylights are designed to withstand normal elements of the weather. They are not designed to withstand human impact or falling objects. These skylights should not be walked upon under any circumstances. The owner or designer should restrict access only to authorized personnel who have been adequately cautioned as to the location of the skylights and informed of the warning above, or said owner should provide protective guard rails or screens around the skylights.

WASCO SKYBLINDS™ SKYLIGHT SHADES

Offering outstanding flexibility in controlling the light and heat that enters a room. SkyBlinds are pleated polyester fabric tension shades that can be installed at any angle, even upside-down. They are operated by a telescopic pole that fits into a recess in the travel rail and is pushed or pulled to move the shade to any position desired.

- Economical
- Saves heating and cooling costs
- Cuts over 90% harmful UV rays
- Sound absorbing
- Easy to install – attach several clips and snap the shade into the window shaft
- Easy to control



Fabric Type/Function	Light Stopped*	Heat Gain Stopped*	UV Rays Stopped*
Pleated Aluminized/ Light Filtering	15%	46%	99%
Pleated Aluminized/ Privacy	70%	78%	99%
Cellular Midnight/ Room Darkening	99%	79%	99%

*Approximate

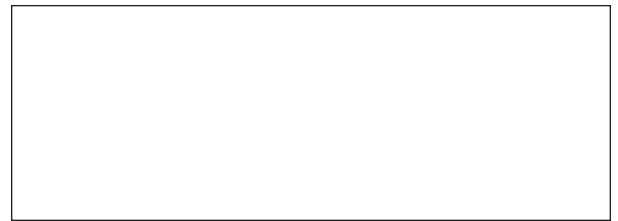
The shades fit into the window shaft below the skylight window – within 3” of the glass or plastic. They are operated by telescopic pole or can be motorized (battery operated) with remote control. All shades come with aluminum side rails, which stop light from coming in around the edges of the fabric, frame the shade and help support the fabric in longer shades. Each shade bottom rail comes with a spring and turnbuckle to make any tension adjustment required.



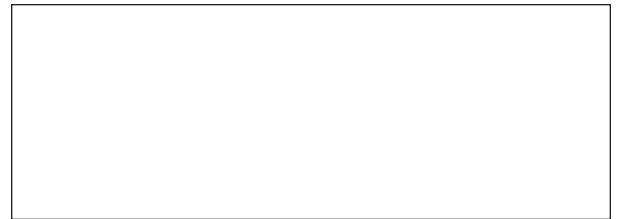
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Post Office Box 351
Sanford, Maine 04073
800-388-0293 Fax: 207-490-5270
sales@wascoproducts.com
www.wascoproducts.com

ITEM L099

PLEATED LIGHT FILTERING FABRIC



WHITE



SHADOWS

PLEATED PRIVACY FABRIC

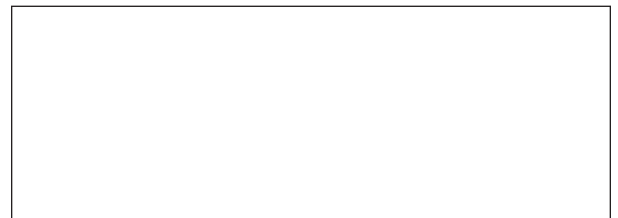


SMOOTH WHITE

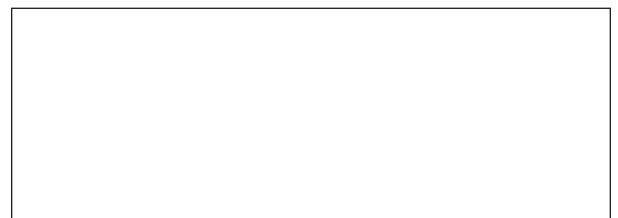


OFF-WHITE

ROOM DARKENING FABRIC



EGGSHELL



ALABASTER

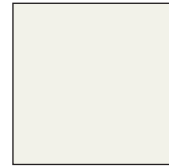


WASCO STANDARD COLORS GUIDE

NOTE: The colors in this file are approximated by printing inks, and are for general reference only. Contact Wasco to request paint chips before choosing a color.



BONE WHITE



COLONIAL WHITE



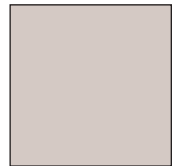
BLACK



BRICK RED



COLONIAL GRAY



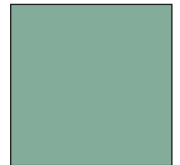
SANDSTONE



HARTFORD GREEN



INTERSTATE GREEN



AGED COPPER



QUAKER BRONZE

AVAILABLE IN KYNAR 500®, AND BAKED ENAMEL

The colors shown are not exact and are intended for specification purposes. Upon request, Wasco, will send you an actual color chip.



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WWW.WASCOPRODUCTS.COM

AAMA PAINT SPECIFICATIONS

	AAMA 2603 (same as AAMA 603)	AAMA 2604 (same as AAMA 605)	AAMA 2605 (new specification)
South Florida Weathering:			
Color Retention	1 yr: "slight" fade	5 yrs: Fade = 5 Delta E	10 yrs: Fade = 5 Delta E
Chalk Resistance	1 yr: "slight" chalk	5 yrs: Chalk = 8	10 yrs: Chalk = 8
Gloss Resistance	No specification	5 yrs: 30% retention	10 yrs: 50% retention
Erosion Resistance	No specification	5 yrs: 10% loss	10 yrs: 10% loss
Dry Film Thickness			
	0.8 mils minimum	1.2 mils minimum	1.2 mils minimum
Pretreatment System			
	Chrome or Chrome Free	Chrome or Chrome Free	Chrome = 40mg/sq ft
Accelerated Testing:			
Salt Spray	1,500 hours	3,000 hours	4,000 hours
Humidity	1,500 hours	3,000 hours	4,000 hours

All specifications were effective June, 1998.

COLOR AND GLOSS

These colors are available in your choice of Kynar 500®, or Baked Enamel coating. The gloss range is 25 – 35 at an angle of 60°. Custom colors can also be produced from a color standard you supply, depending on the volume anticipated.

The colors shown are not exact and are intended for specification purposes. Upon request, Wasco, will supply an actual color chip or chips of the colors you have specified.



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ITEM L019

Since 1935


Wasco[®]
SKYLIGHTS

Limited Warranty

Wasco Skylights E-Class and G-Series Limited Warranty

WASCO SKYLIGHTS ARE WARRANTED NOT TO LEAK DUE TO DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF TEN (10) YEARS

Wasco will repair or replace, at its option, materials and workmanship that fail to conform to this warranty.

The warranty applies only to the materials and workmanship of the skylights and does not apply to any defect or damage caused by improper use, improper installation, improper care or accident. This warranty does not cover glass breakage, dome breakage, or crazing of domes. Glass is guaranteed against seal failure for a period of ten (10) years. This warranty applies only to the original consumer purchaser and is void upon transfer of title of the goods after installation.

The remedy of repair and replacement of defective products is the purchaser's sole responsibility. Under no circumstances shall Wasco Products, Inc. be liable for any other damages or costs under this warranty or costs due to reinstallation. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusion may not apply to you.

To validate this warranty and to obtain performance under this warranty, the purchaser must comply with the following requirements.

- **The warranty registration card must be completed at the time of purchase and returned to Wasco within 30 days of either the date of purchase or the date of delivery to the first consumer/owner, whichever is later.**
- **Wasco or its authorized agent must examine the skylight and determine that the defect is covered by this warranty.**

This warranty is exclusive and in lieu of all other warranties. This warranty gives you specific legal rights. You may have other rights, which vary from state to state.

In the event of any warranty claim, an authorized Wasco agent must be notified in writing within 30 days after defect is discovered. Said authorized Wasco agent will arrange to have your claim investigated. If there is no authorized agent in your area, you may write to the address below.

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Wasco Products, Inc. 22 Pioneer Avenue P.O. Box 351 Sanford, Maine 04073

Residential Literature Request Form

Fax completed form to (207) 490-5271. Call your sales representative for pricing.

Request Information:

Name:

Company:

Date:

Department:

Phone:

Shipping Information:

Name:

Company:

Address:

City:

State:

Zip:

Literature

Item #	Description	Quantity Required	Quantity Approved
L009	Architectural Finishes Color Selector Sheet		
L014	Distributor Discount Schedule		
L019	Residential Price Guide		
L025	Residential Skylights Brochure (4-fold, 4" x 9")		
L026	Residential Skylights Brochure – Full Line (16 pages, 8½" x 11")		
L099	Skyblind Sell Sheet		
L300	Showhouse Brochure		

Literature Packages

Item #	P.O.P. Description	Quantity Required	Quantity Approved
AA1	Skylights Poster		
AA12	E-Class Display		
AA13	G-Series Display		
AA14	Architectural Series CPY unit with stand		

Samples – Residential

Item #	Description
EF0808CT	EF Sample
EV0808CT	EV Sample
GS0808CT	GS Sample
EF1515CT	EF Sample Sized

Samples – Commercial

Item #	Description
DDBVSAMP	Arched Sample
LPGSAMP	Planar Sample
DDCS10808CCS	DDCS1 Sample
DDCA10808CCS	DDCA1 Sample
CPYSAMP	Pyramid Sample



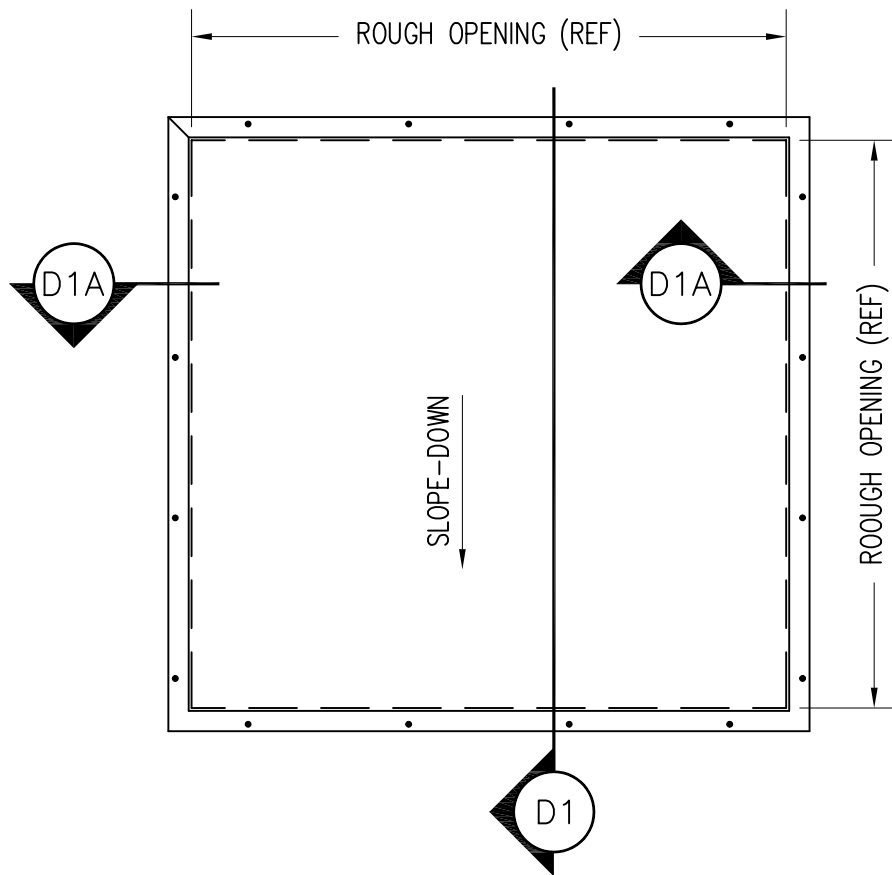


Model EV

Ultraseal™ Self-Flashing Venting Glass Skylight

Model EVM

Ultraseal™ Self-Flashing Motorized Venting Glass Skylight



GENERAL NOTES:

- 1) UNITS ARE AVAILABLE IN STANDARD SIZES LISTED
(CUSTOM SIZES ARE AVAILABLE UP TO MAX. 48"X48" ROUGH OPENING)
- 2) MIN. UNIT PITCH NOT LESS THAN 3:12

MODEL	ROUGH OPENING
2222	22 1/2" X 22 1/2"
2230	22 1/2" X 30 1/2"
2238	22 1/2" X 38 1/2"
2246	22 1/2" X 46 1/2"
3030	30 1/2" X 30 1/2"
3046	30 1/2" X 46 1/2"
4646	46 1/2" X 46 1/2"

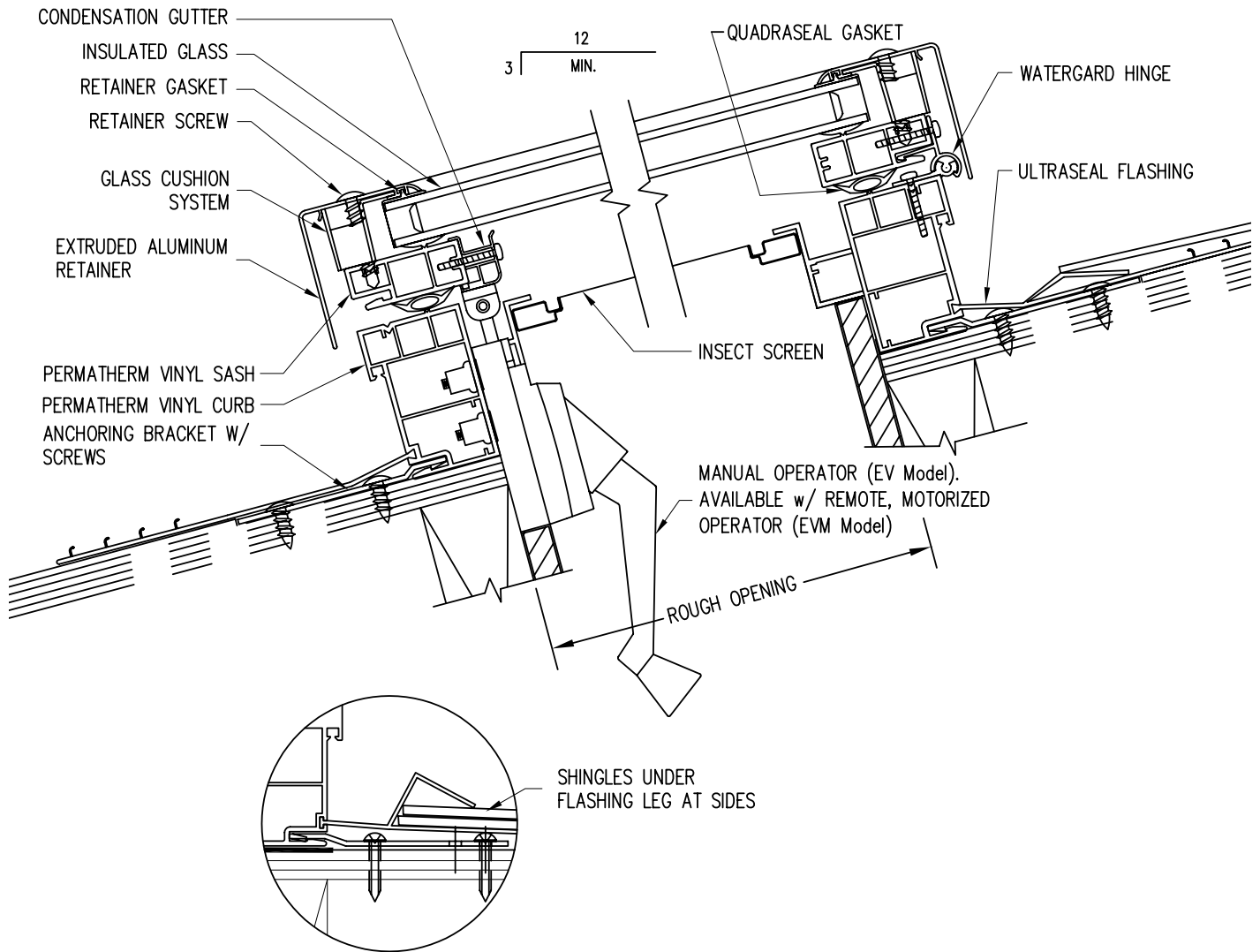


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**EV/EVM Deck Mount
SkyWindow Unit
Plan View**

D052

PLN1



DETAIL D1A
FLASHING LEG AT SIDE JAMB LOCATIONS ONLY



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D052

EV/EVM Sill Detail

D1

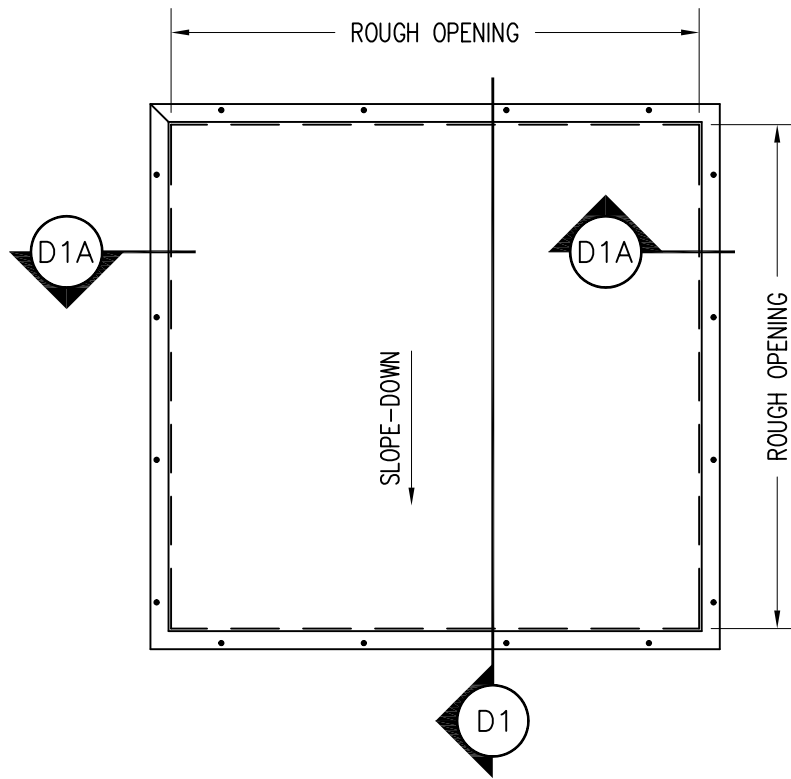


Model EF

Ultraseal™ Self-Flashing Fixed Glass Skylight

Model EFHR Hurricane

Ultraseal™ Self-Flashing Fixed Glass Skylight



GENERAL NOTES:

- 1) UNITS STANDARD SIZES ARE LISTED, ALSO AVAILABLE IN CUSTOM SIZES
- 2) MIN. UNIT PITCH NOT LESS THAN 3:12

MODEL	ROUGH OPENING
1430	14 1/2" X 30 1/2"
1446	14 1/2" X 46 1/2"
2222	22 1/2" X 22 1/2"
2230	22 1/2" X 30 1/2"
2238	22 1/2" X 38 1/2"
2246	22 1/2" X 46 1/2"
3030	30 1/2" X 30 1/2"
3046	30 1/2" X 46 1/2"
4646	46 1/2" X 46 1/2"

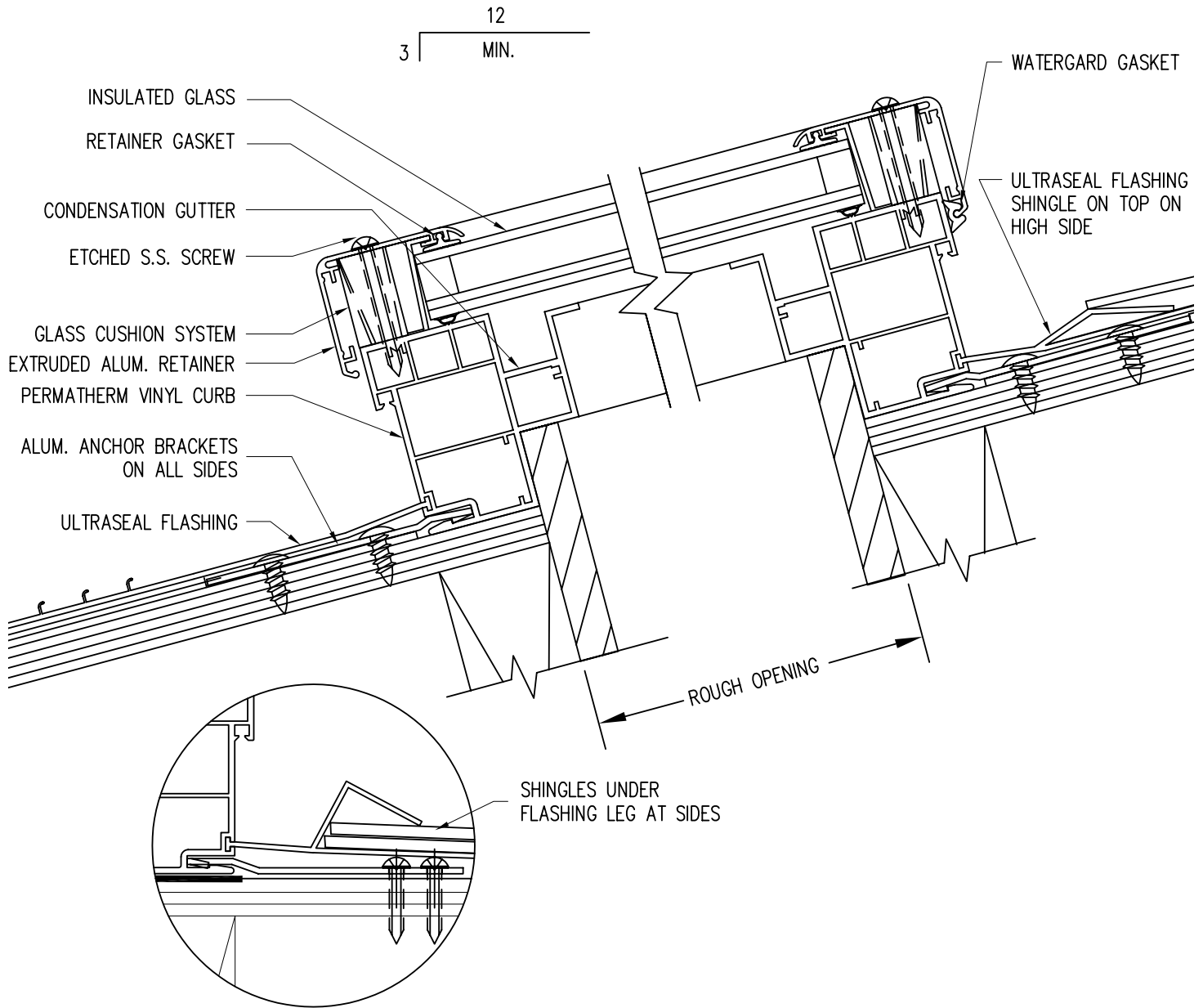


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**EF Deck Mount
 SkyWindow Unit
 Plan View**

D051

PLN1



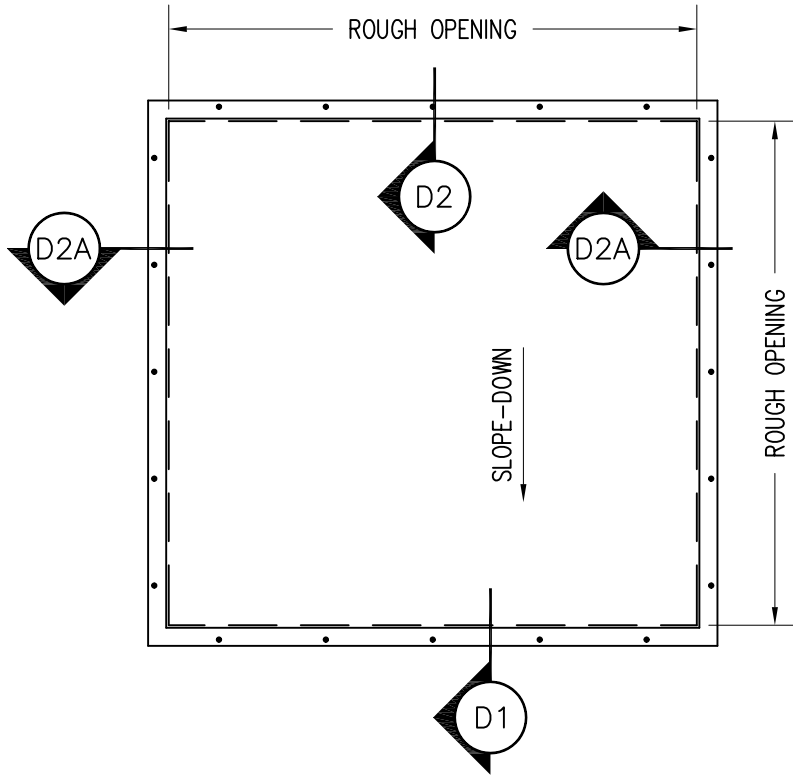
DETAIL D1A
FLASHING LEG AT JAMB LOCATIONS



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EF Sill Detail

D051
D1



GENERAL NOTES:

- 1) UNITS ARE AVAILABLE IN STANDARD SIZES LISTED
(CUSTOM SIZES ARE NOT AVAILABLE)
- 2) ROOF PITCH REQUIREMENTS FOR SKYLIGHTS VARY WITH LOCAL BUILDING CODES
FOR HURRICANE SPECIFIC CONSTRUCTIONS APPLICATIONS. MINIMUM 3:12 ROOF PITCH
IS REQUIRED FOR ANY APPLICATION. CONSULT LOCAL CODES.
- 3) ROOF FRAMING AND SURFACE CONSTRUCTION SHOWN IN DETAILS IS FOR REFERENCE ONLY.
ROOFING REQUIREMENTS ARE DICTATED BY LOCAL BUILDING CODES AND ARE THE RESPONSIBILITY
OF THE BUILDER.

MODEL	ROUGH OPENING
2222	22 1/2" X 22 1/2"
2246	22 1/2" X 46 1/2"
3046	30 1/2" X 46 1/2"
4646	46 1/2" X 46 1/2"



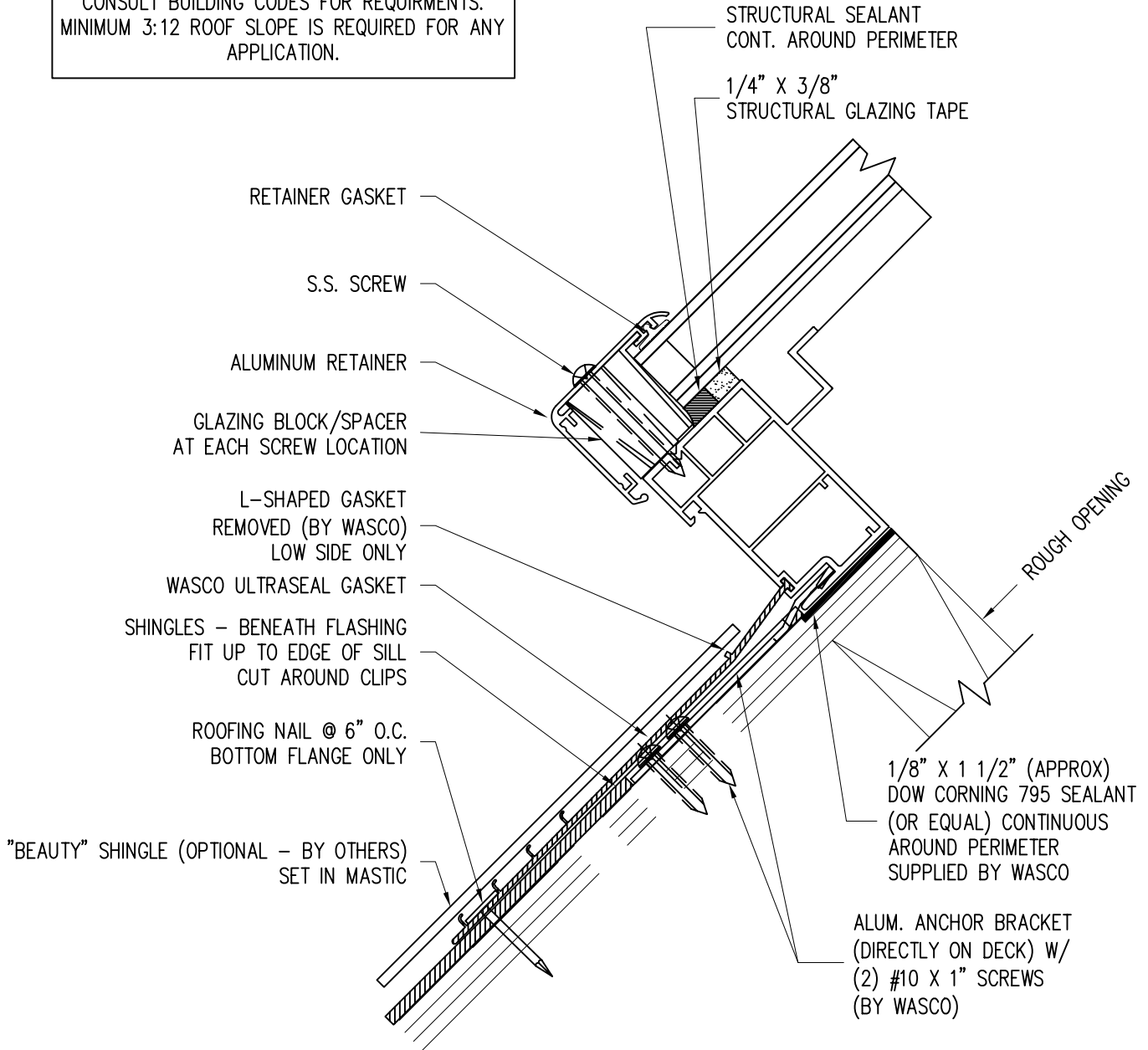
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**EFHR Hurricane
Deck Mount
SkyWindow Unit
Plan View**

D051

PLN1

IMPORTANT NOTE:
 ROOF PITCH REQUIREMENTS FOR SKYLIGHTS VARY
 WITH LOCAL BUILDING CODES FOR HURRICANE
 SPECIFIC CONSTRUCTION APPLICATIONS. PLEASE
 CONSULT BUILDING CODES FOR REQUIRMENTS.
 MINIMUM 3:12 ROOF SLOPE IS REQUIRED FOR ANY
 APPLICATION.

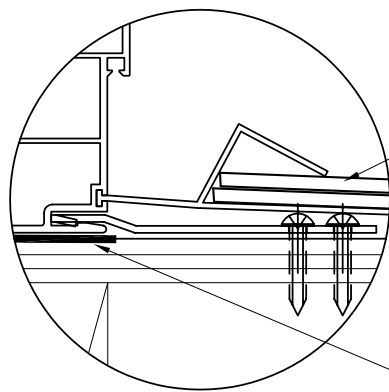
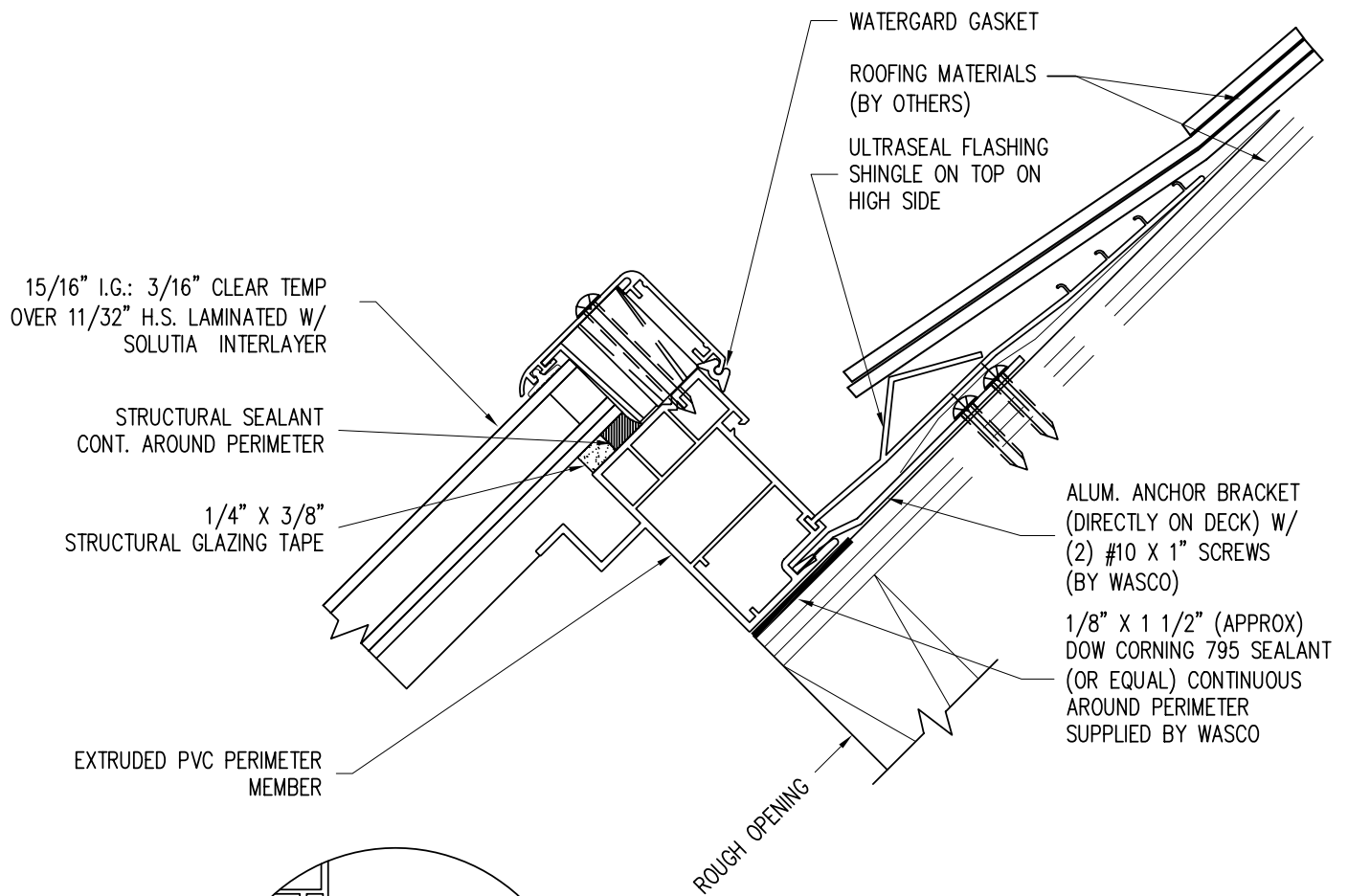


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EFHR Hurricane Sill Detail

D051

D1



DETAIL D2A
FLASHING LEG AT JAMB LOCATIONS

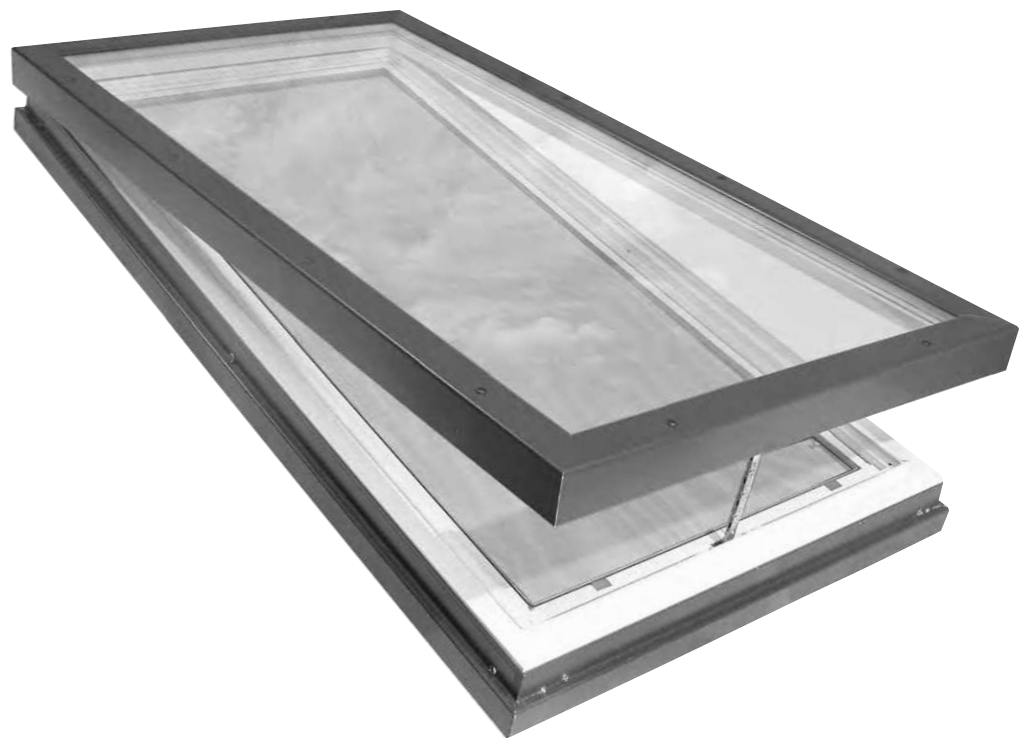


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**EFHR Hurricane
Head/Jamb Detail**

D051

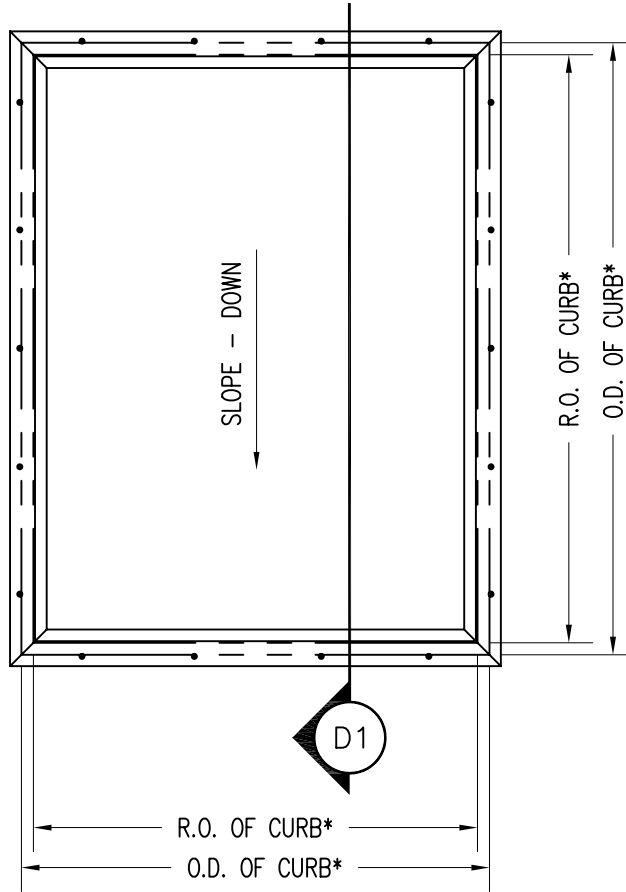
D2



Model GSV

Curb Mounted Permatherm Venting Glass Skylight

Item D054



GENERAL NOTES:

- 1) UNITS STANDARD SIZES ARE LISTED, ALSO AVAILABLE IN CUSTOM SIZES
- 2) MIN. UNIT PITCH NOT LESS THAN 3:12
- 3) *O.D. & R.O. OF CURB BASED ON 1 1/2" MIN. CURB WIDTH
- 4) **MOTORIZED OPTIONS AVAILABLE (SOME RESTRICTIONS APPLY)

MODEL	R.O. OF CURB*	O.D. OF CURB*
2222	22 1/2" X 22 1/2"	25 1/2" X 25 1/2"
2230	22 1/2" X 30 1/2"	25 1/2" X 33 1/2"
2238	22 1/2" X 38 1/2"	25 1/2" X 41 1/2"
2246	22 1/2" X 46 1/2"	25 1/2" X 49 1/2"
3030	30 1/2" X 30 1/2"	33 1/2" X 33 1/2"
3046	30 1/2" X 46 1/2"	33 1/2" X 49 1/2"
4646	46 1/2" X 46 1/2"	49 1/2" X 49 1/2"

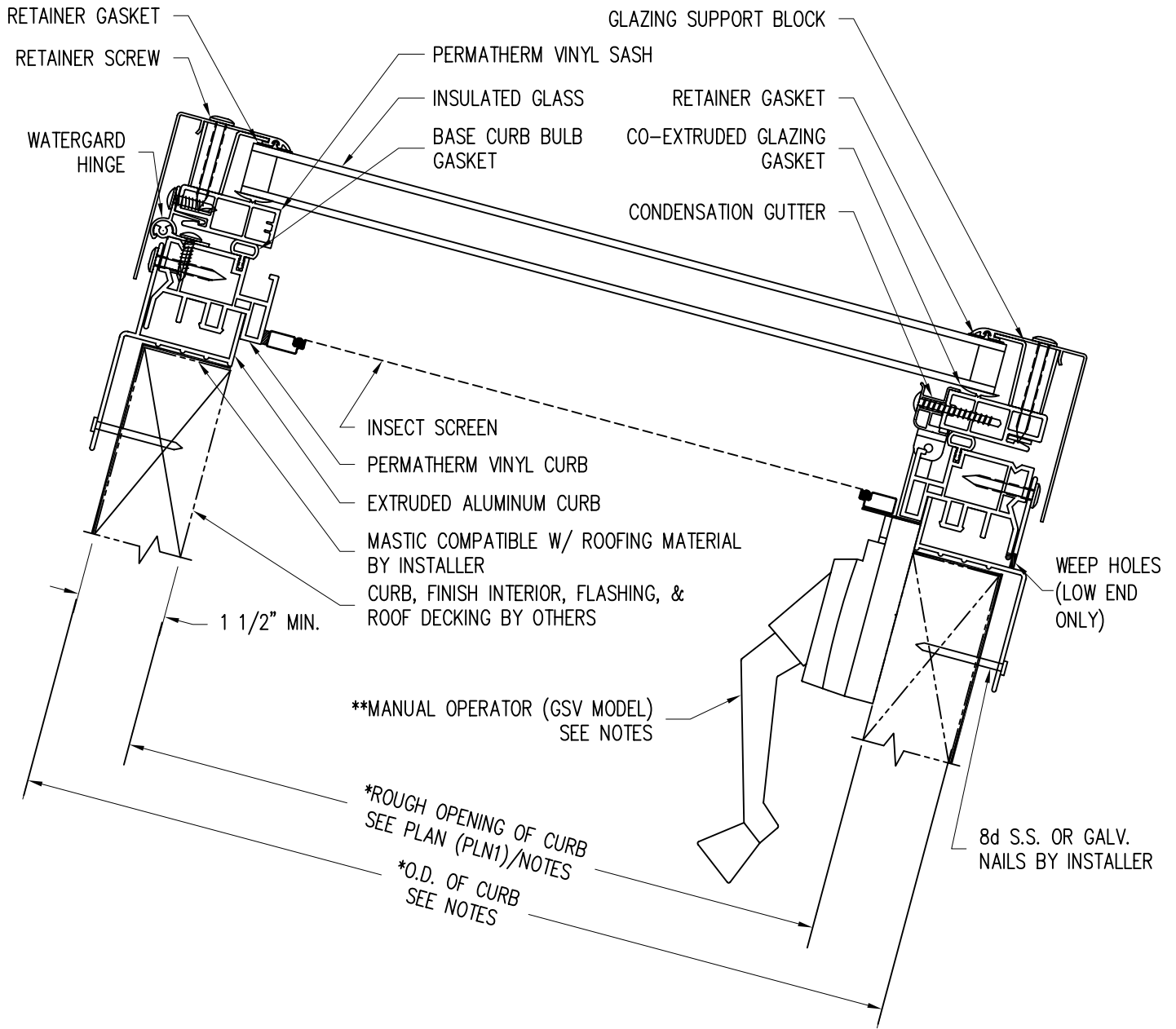


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GSV Curb Mount Skydome Unit Plan View

D054

PLN1



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**GSV
 Sill Detail**

D054
D1



Model GS

Curb Mounted Permatherm Fixed Glass Skylight

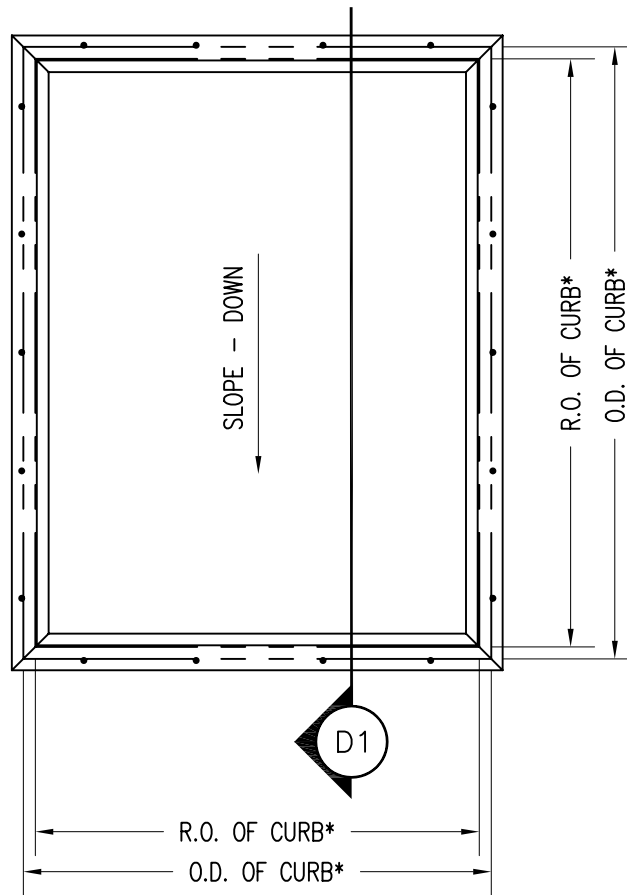
Model GSHR Hurricane

Curb Mounted Permatherm Fixed Glass Skylight



Model GSD (DDRS)

Curb Mounted Permatherm Fixed Acrylic
Double Dome Skylight



GENERAL NOTES:

- 1) UNITS STANDARD SIZES ARE LISTED, ALSO AVAILABLE IN CUSTOM SIZES
- 2) MIN. UNIT PITCH NOT LESS THAN 3:12
- 3) *O.D. & R.O. OF CURB BASED ON 1 1/2" MIN. CURB WIDTH

MODEL	R.O. OF CURB*	O.D. OF CURB*
2222	22 1/2" X 22 1/2"	25 1/2" X 25 1/2"
2230	22 1/2" X 30 1/2"	25 1/2" X 33 1/2"
2238	22 1/2" X 38 1/2"	25 1/2" X 41 1/2"
2246	22 1/2" X 46 1/2"	25 1/2" X 49 1/2"
3030	30 1/2" X 30 1/2"	33 1/2" X 33 1/2"
3046	30 1/2" X 46 1/2"	33 1/2" X 49 1/2"
4646	46 1/2" X 46 1/2"	49 1/2" X 49 1/2"

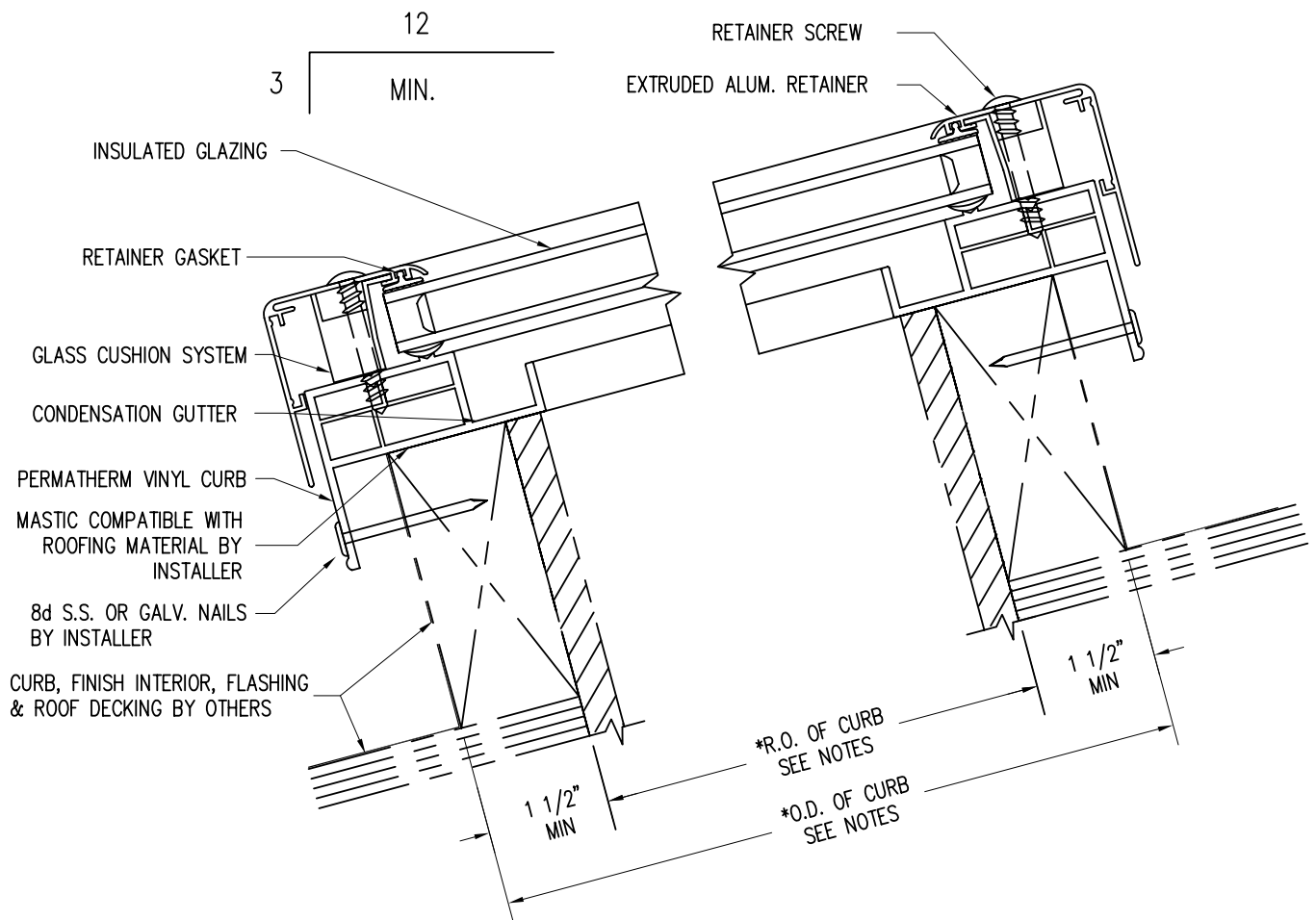


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**GS Curb Mount
 SkyWindow Unit
 Plan View**

D050

PLN1

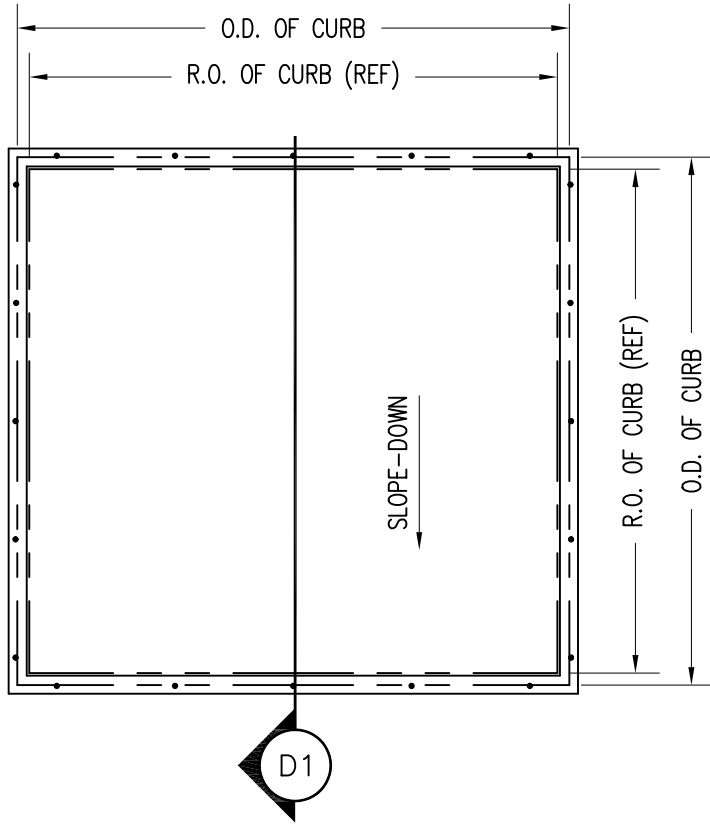


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GS Curb Mount SkyWindow Unit Detail

D050

D1

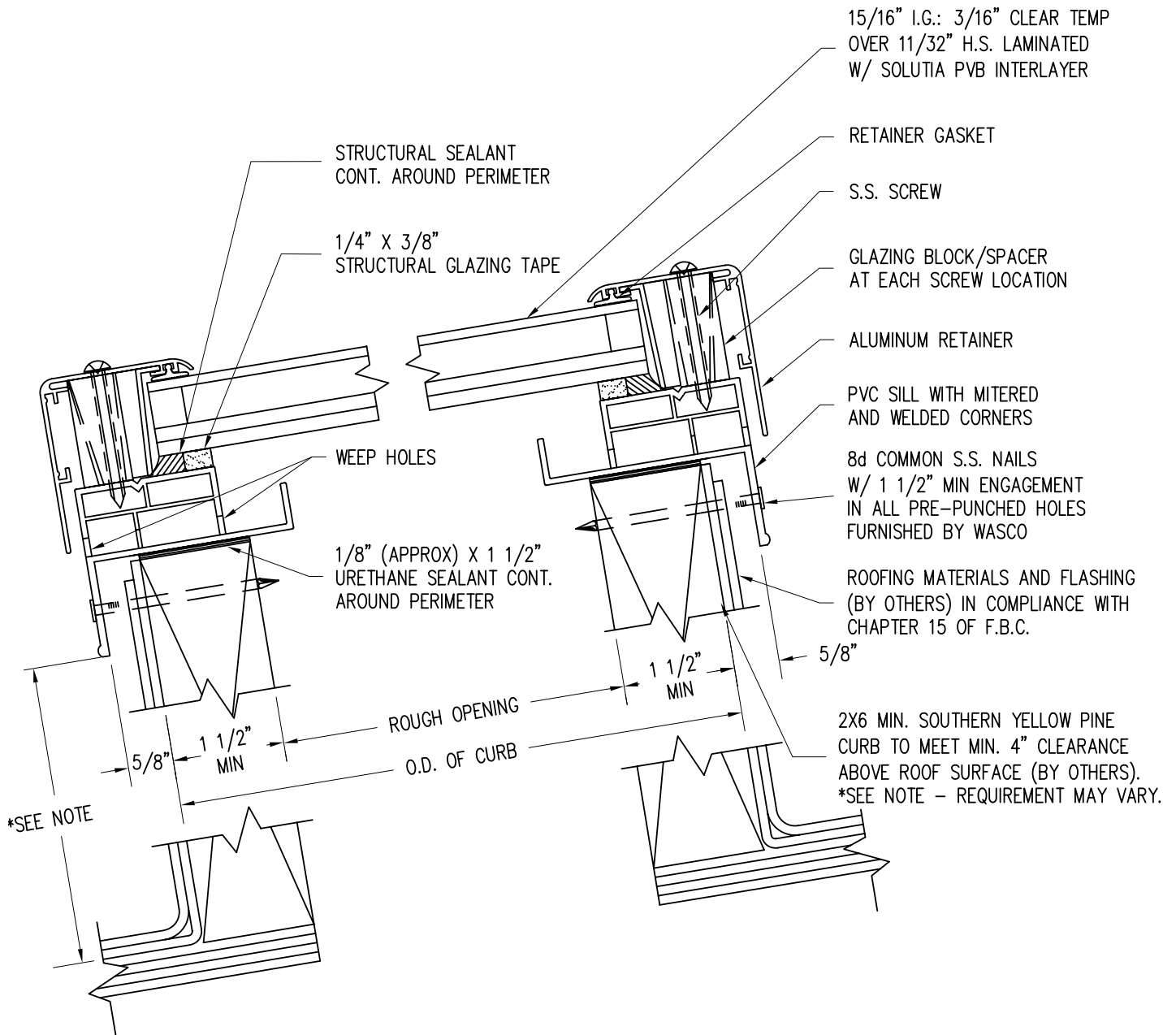


GENERAL NOTES:

- 1) UNITS ARE AVAILABLE IN STANDARD SIZES LISTED (CUSTOM SIZES ARE NOT AVAILABLE)
- 2) ROOF PITCH REQUIREMENTS FOR SKYLIGHTS VARY WITH LOCAL BUILDING CODES FOR HURRICANE SPECIFIC CONSTRUCTION APPLICATIONS. MIN. UNIT PITCH NOT LESS THAN 3:12 IS REQUIRED FOR ANY APPLICATION. CONSULT LOCAL CODES FOR SPECIFIC USE GROUP CRITERIA.
- 3) ROUGH OPENING OF CURB BASED ON MIN. 1 1/2" CURB WIDTH (BY OTHERS)
- 4) GSHR UNIT CARRIES A MIAMI-DADE NOA #04.0728.03 EXPIRATION OCTOBER 20, 2010
- 5) ROOF FRAMING AND SURFACE CONSTRUCTION SHOWN IN DETAILS ARE FOR REFERENCE ONLY. ROOFING REQUIREMENTS ARE DICTATED BY LOCAL BUILDING CODES AND ARE THE RESPONSIBILITY OF THE BUILDER.

MODEL	R.O. OF CURB*	O.D. OF CURB
2222	22 1/2" X 22 1/2"	25 1/2" X 25 1/2"
2246	22 1/2" X 46 1/2"	25 1/2" X 49 1/2"
3046	30 1/2" X 46 1/2"	33 1/2" X 49 1/2"
4646	46 1/2" X 46 1/2"	49 1/2" X 49 1/2"

 <p>Since 1935 Wasco SKYLIGHTS</p>	<p>Wasco Products, Inc. 22 Pioneer Avenue, P.O. Box 351 Sanford, ME 04073 Fax: 207-490-5270 sales@wascoproducts.com 800-388-0293 www.wascoproducts.com</p>	<p>GSHR Hurricane Curb Mount SkyWindow Unit Plan View</p> <p>D050</p> <p style="font-size: 2em; font-weight: bold;">PLN1</p>
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***IMPORTANT NOTE:**
 ROOF SLOPE, AS WELL AS ROOF FRAMING AND SKYLIGHT UNIT HEIGHT ORIENTATION ABOVE ROOF SURFACE, REQUIREMENT FOR SKYLIGHTS VARIES WITH LOCAL BUILDING CODES FOR HURRICANE SPECIFIC CONSTRUCTION APPLICATIONS. PLEASE CONSULT BUILDING CODES FOR REQUIREMENTS. MINIMUM 3:12 ROOF SLOPE IS REQUIRED FOR ANY APPLICATION.

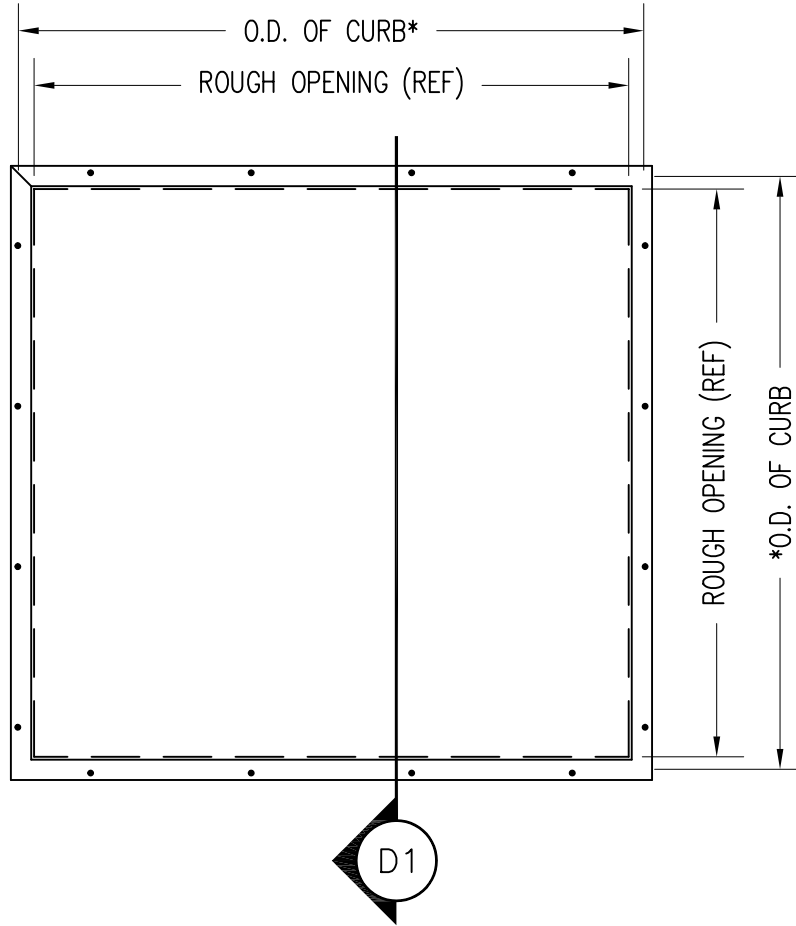


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GSHR Hurricane Sill Detail

D050

D1



GENERAL NOTES:

- 1) UNITS ARE AVAILABLE IN STANDARD SIZES LISTED
(CUSTOM SIZES ARE NOT AVAILABLE)
- 2) UNIT PITCH NOT CRITICAL FOR DOMED UNIT SKYLIGHTS
- 3) *O.D. (OUTSIDE DIMENSION) OF CURB BASED ON A 1½" (MIN.) CURB

MODEL	ROUGH OPENING	O.D. OF CURB*
2222	22 1/2" X 22 1/2"	25 1/2" X 25 1/2"
2230	22 1/2" X 30 1/2"	25 1/2" X 33 1/2"
2238	22 1/2" X 38 1/2"	25 1/2" X 41 1/2"
2246	22 1/2" X 46 1/2"	25 1/2" X 49 1/2"
3030	30 1/2" X 30 1/2"	33 1/2" X 33 1/2"
3046	30 1/2" X 46 1/2"	33 1/2" X 49 1/2"
4646	46 1/2" X 46 1/2"	49 1/2" X 49 1/2"

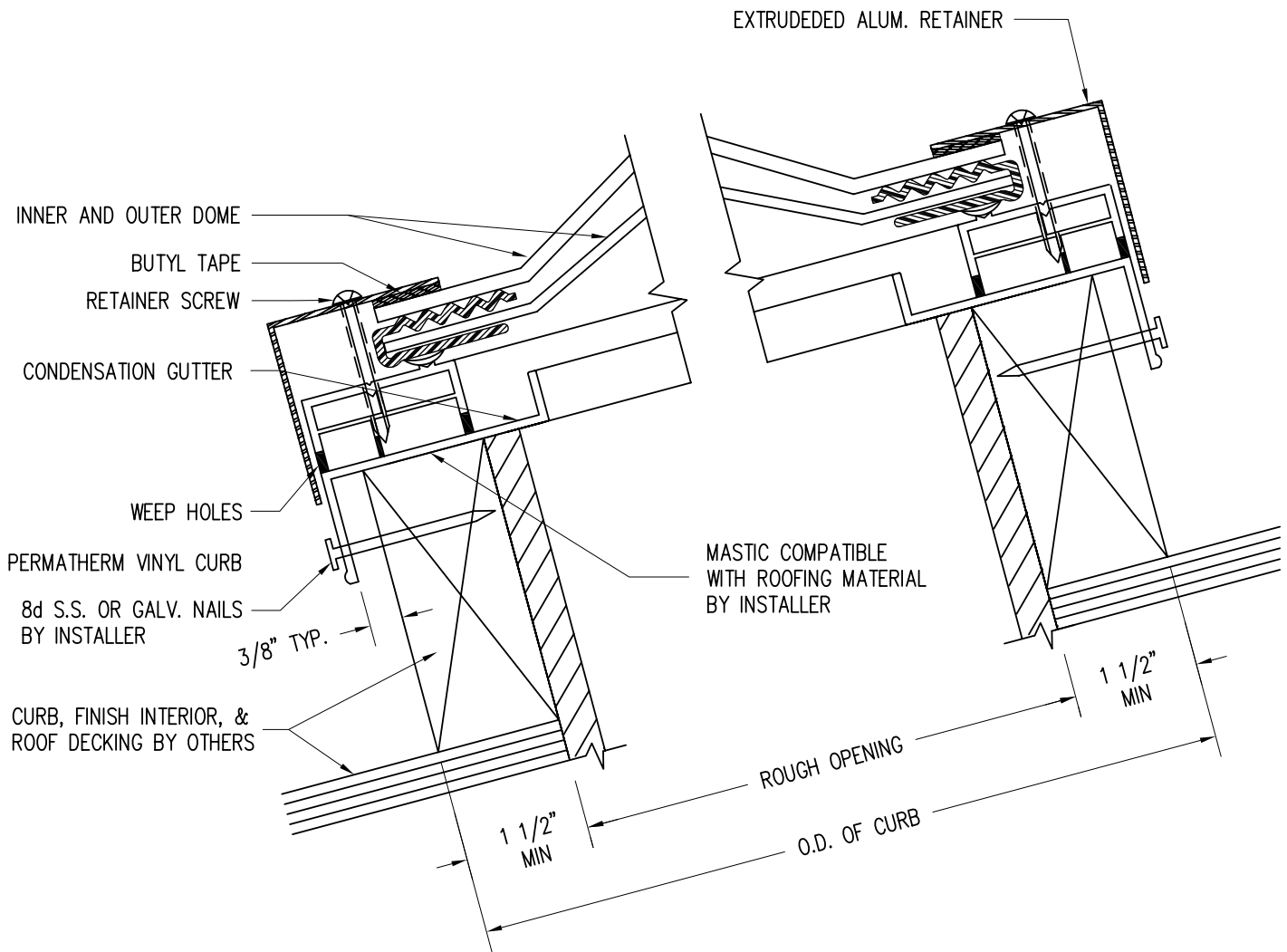


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**GSD (DDRS) Curb
 Mount Skywindow
 Unit Plan View**

D050

PLN1



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**GSD (DDRS) Curb
 Mount Skywindow
 Unit Detail**

D050

D1



SAFETY CONSIDERATIONS

While Wasco Skylights are designed to support the weight of snow, ice and the force of normal winds, they are not designed to withstand the weight of people. If human safety becomes considerations, skylights should be protected by railings, grids or screens.

READ THE INSTRUCTIONS

Consider your particular installation and know in advance if any additional tools or materials (e.g. decorative wood trim, paneling, etc.) are required. Examine the illustration to the right to familiarize yourself with the way the new E-Class Ultraseal Flashing System works. A basic understanding of how this flashing works will help you do a better installation job.

Before installing the skylight, take time to study the general construction of the roof opening, ceiling opening and light shaft (well) construction to ensure you are prepared for the task ahead. If units are to be mulled together contact Wasco for supplemental instructions. Wood shake installation instructions are on the back page.

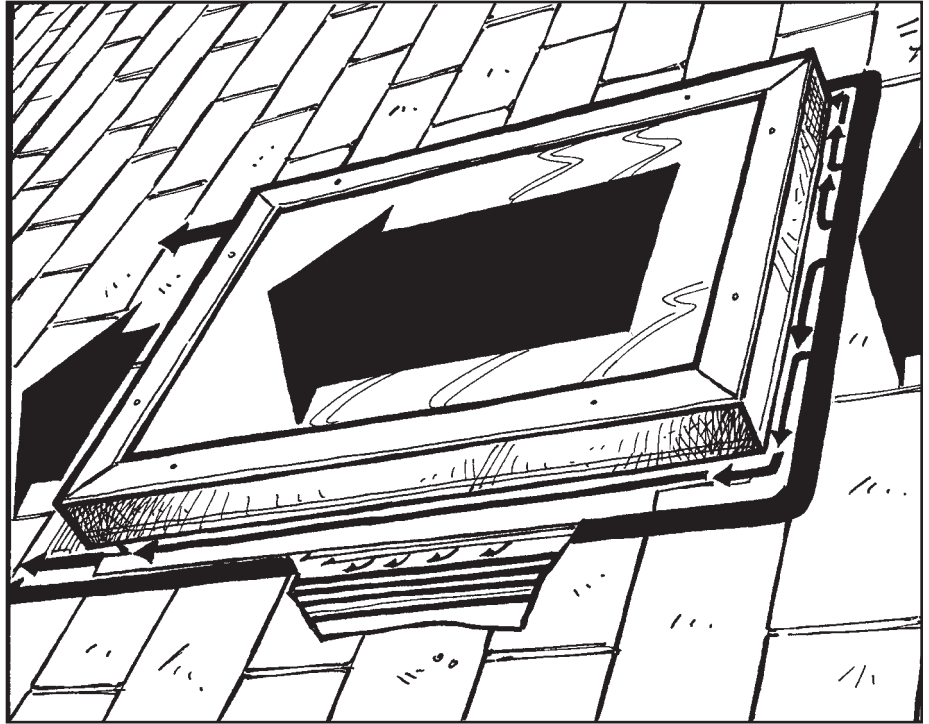
PREPARATION

Plan your installation for a dry, calm day. Make sure you have help carrying the skylight to the roof, and leave it in the packaging to protect it. The new Wasco Ultraseal Flashing System is made of a soft plastic material. CAUTION: Do not lift unit by flange. While the flashing is extremely durable, care should be taken to keep sharp objects away from it. Roof work should be carried out in accordance with all applicable laws and building codes, and good roofing practices.

PROPER LOCATION FOR SKYLIGHTS

While all Wasco Skylights are designed to fit conveniently between standard rafter spacings, you may want to pay attention to any windows or doors on adjoining walls and center the skylights accordingly. When the skylight is used in a roof-window application, be sure to position it so the height allows for optimum viewing and operation. Also, remember that framing to allow for a horizontal top header and vertical sill header will produce better light dispersion.

Minimum Roof Pitch of 3" in 12" Required



The illustration above reveals the heart of the E-Class Skylight's ingenious design—the Ultraseal Flashing System. This system incorporates a 6" wide flexible vinyl flange, which conforms to the roof deck to form a compliant seal, which completely eliminates the need for any sealants. With Ultraseal, the rigid Permatherm, curb and flexible vinyl flange are permanently bonded to form a one-piece flashing system.

The key to a successful skylight installation is keeping water off the roof deck, which the E-Class does with a series of water channels. The primary water diverter channel redirects water from above the skylight onto the shingles below. At the flange's outer edge, four smaller channels complete the fail-safe waterproof design.

The E-Class Skylight will save time and money because it can be installed in one quarter of the time required by skylights using step flashing or sealants. Installation is simplified because no complex flashing kit or messy mastic is needed to provide a permanent weatherproof seal to the roof deck.

TOOLS & MATERIALS

- Measuring Tape
- Carpenter's Square
- Plumb Line and Chalk Line
- Hammer and Roofing Nails
- Keyhole Saw, Hand Saw and Circular Saw
- Shingle Nail Puller, Catspaw
- Utility Knife
- Ladder and Roof Brackets
- Extra Shingles and Framing Lumber
- Sheetrock, Joint Compound and Plastering Knife
- Paint and Paint Brushes
- Screwdriver, Philips
- Please check to ensure the enclosed hardware kit contains the following items:
- Anchor brackets, 10 (12 for 2270); part number 2091000
- Screw pan head 1", two per anchor bracket; part number 1122201
- 1 1/2" wood screw, two (vent only); part number 1105701
- Handcrank, one (vent only); part number 1101700

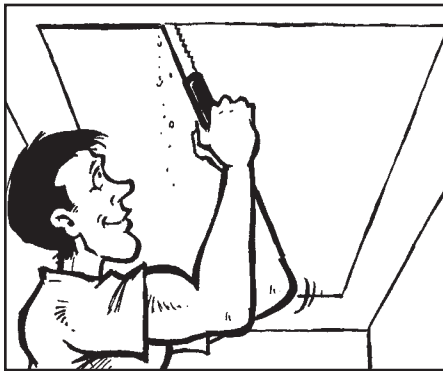
RECOMMENDED APPLICATIONS

For use with thin roofing materials such as composition, slate, wood shingles and shakes up to 3/4" thick. Mulling kit available for ganged applications. Not for vertical applications. For technical assistance call 1-800-388-0293.

STEP 1

Locate the ceiling opening for the skylight well you desire. Drive nails up into the ceiling to locate the four corners of the opening in the attic and mark the location with a chalk line. NOTE: If any wiring or plumbing is found to be within this area, it must be relocated before you can proceed.

STEP 2



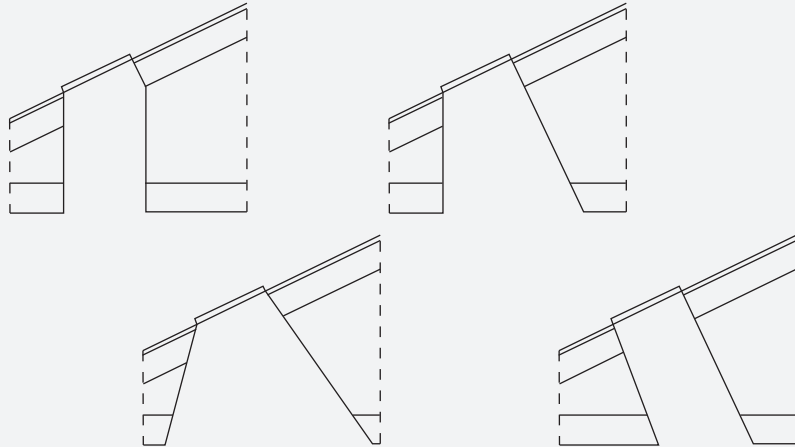
Cut the ceiling opening with a saw or sheetrock knife. Cut through any ceiling joists within the opening and support temporarily. Frame the opening with headers and trimmer joists as needed. NOTE: To maintain the structural integrity of the roof and ceiling, double headers, rafters and joists may be necessary.



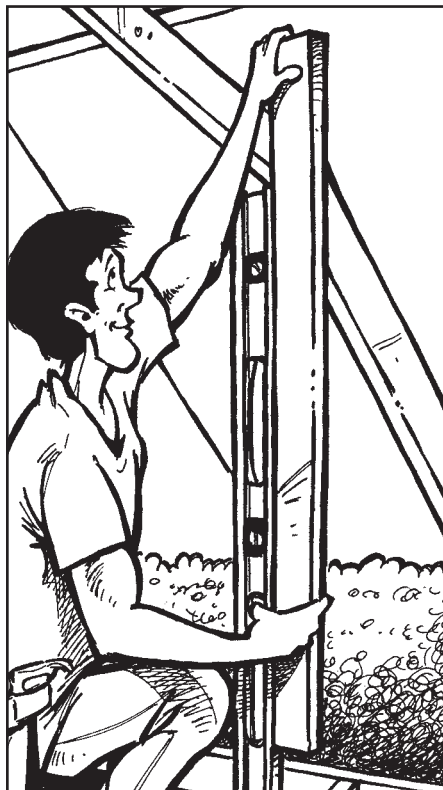
SKETCH 1

Alternate Light-Shaft Options

Be sure to allow for screen removal on vent units



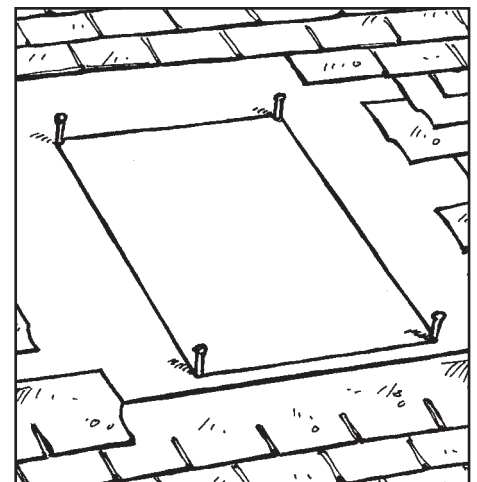
STEP 3



Locate the two bottom corners of the skylight opening on the underside of the roof deck, relative to the ceiling opening and type of well. Mark these points on the

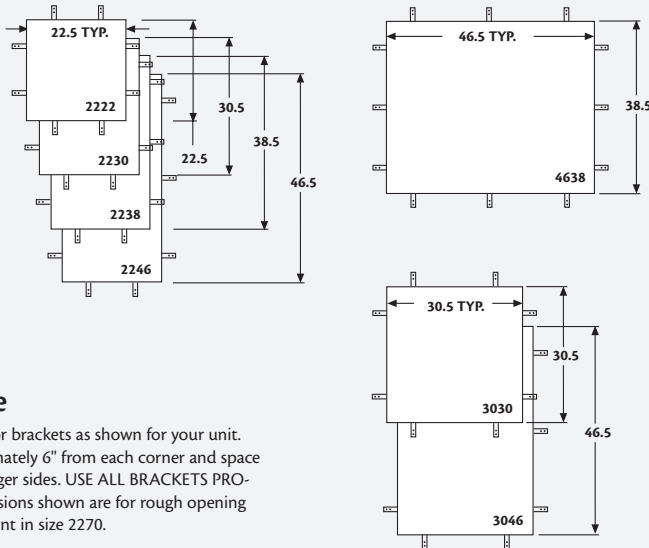
roof by driving nails through the roof deck. Measure up from the two nails the appropriate distance as required by your unit (refer to Sketch 3) to locate the top corners of the roof opening and mark them with nails also.

STEP 4



Move to the roof and using the four nails as guides, remove the shingles (but not the felt paper) to approximately 12" back from the top and sides of the roof opening (as shown by the nails) but only 2" back from the bottom edge.

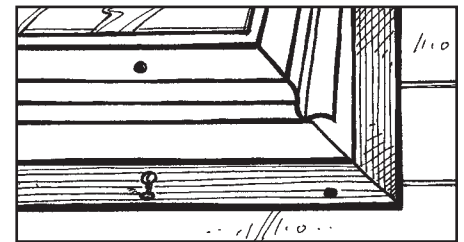
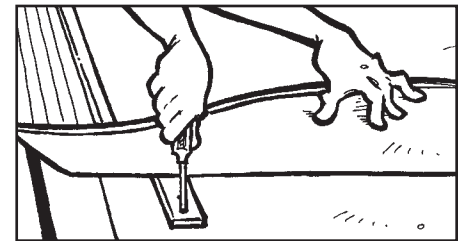
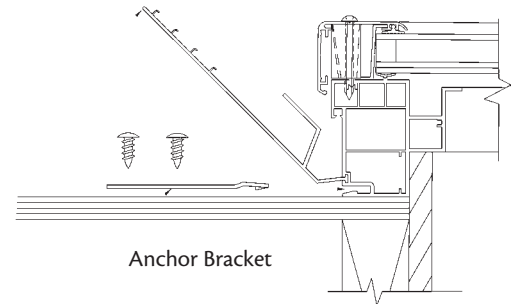
SKETCH 2 E-Class Skywindow Rough Opening Dimensions



Unit Size

Position anchor brackets as shown for your unit. Place approximately 6" from each corner and space equally on longer sides. USE ALL BRACKETS PROVIDED. Dimensions shown are for rough opening framing. No vent in size 2270.

STEP 8

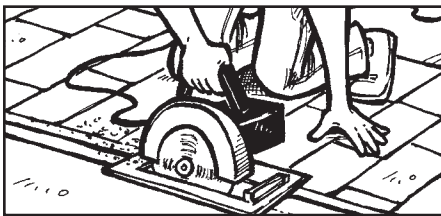


STEP 5

Using a chalk line or straight edge, mark the opening on the roof deck. Check the dimensions against those in Sketch 2, and check that the diagonal dimensions are the same; to be sure the opening will be square. It is recommended that felt paper be cut back 2" prior to beginning Step 6.

intermediate roof rafter is to be cut, it may be necessary to temporarily support it until a header can be installed. NOTE: Using a circular saw, make a slot cut 1/2" back from the opening and above the rafter to be cut. This will allow you to cut the rafter with a handsaw and leave space for the header.

STEP 6



Cut the roof opening as marked and remove the roof decking. If an

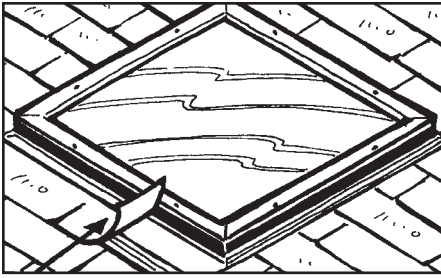
STEP 7



Frame the opening with headers and short rafters. As with the ceiling, use double headers and rafters if extra support is needed. Clean any sawdust or other debris from around the opening.

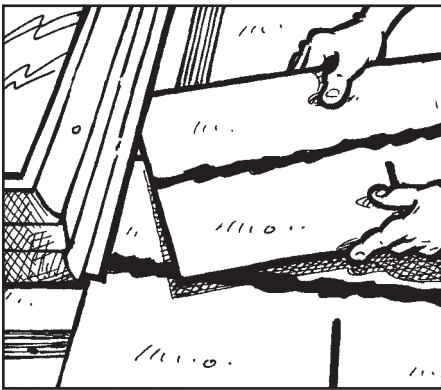
Snap the aluminum anchoring brackets in place in the groove found directly underneath the Ultraseal Flashing. Use the spacing found in Sketch 2. Center the unit over the opening and fasten in place with the screws provided, lifting the Ultraseal Flashing up to expose the brackets. Be sure to slide the brackets into the correct positions before fastening. NOTE: Temporary woodblocks can be installed extending above the roof deck on both upper corners to help you position the skylight more easily.

IMPORTANT: The Ultraseal Flashing **MUST** be over the bottom row of shingles at this point in order for water to drain correctly onto the shingles below. Nail the bottom edge of the Ultraseal Flashing down to the roof deck with roofing nails spaced about 6" apart. Then apply one nail to each top corner to hold unit in place. You may wish to install shingles across the bottom edge of the flashing if you prefer that appearance.



Cosmetic Shingle

STEP 9

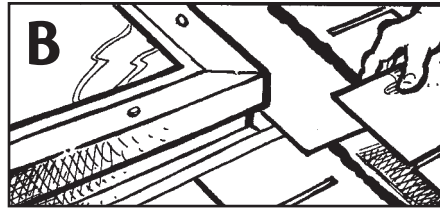


Replace shingles up along both sides of the skywindow. **IMPORTANT:** Trim the shingles to fit under the "L" shaped gasket of the Ultraseal Flashing as shown in Detail B of Sketch 3. This gasket holds the shingles tight to the flashing and provides a finished look to the installation. If necessary, trim shingles to fit at the top corners.

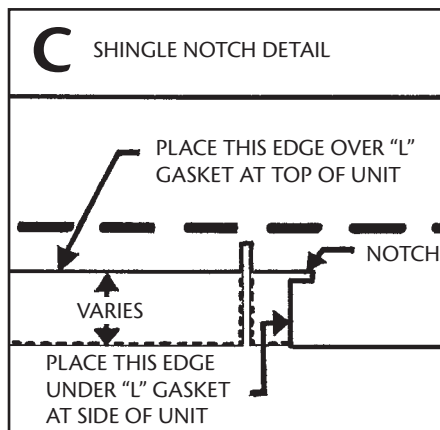
STEP 10



At the top side of the unit, nail shingles inverted (shown in red, i.e. with tabs pointing up-slope) across the width and over the flashing as in Illustration A. **IMPORTANT:** Place shingles on top of "L" shaped gasket as shown in Detail A of Sketch 3. The weight of the shingles will depress the gasket, which will form a water channel. The channel allows water to flow around the skywindow and onto shingles below.



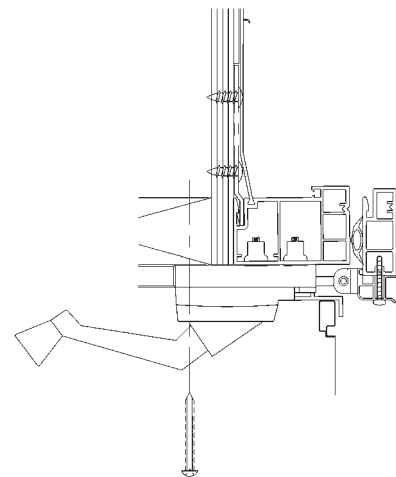
Next, place the shingles (positioned normally) directly over upside-down row (as shown in illustration B). If necessary, notch shingle as shown in Illustration C below.



This notch facilitates the transition from the side of the unit where the shingles go under the "L" gasket, to the top of the unit where they go over it. Continue shingling to complete installation.

STEP 11

(Vent Unit Only)



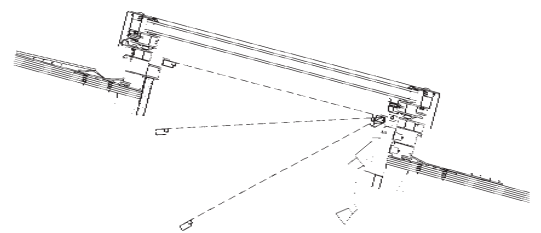
Attach the operator to the well framing with the two wood screws provided in the hardware kit. Refer to Sketch 4 for vent sash removal.

STEP 12

From the inside, frame the well, which



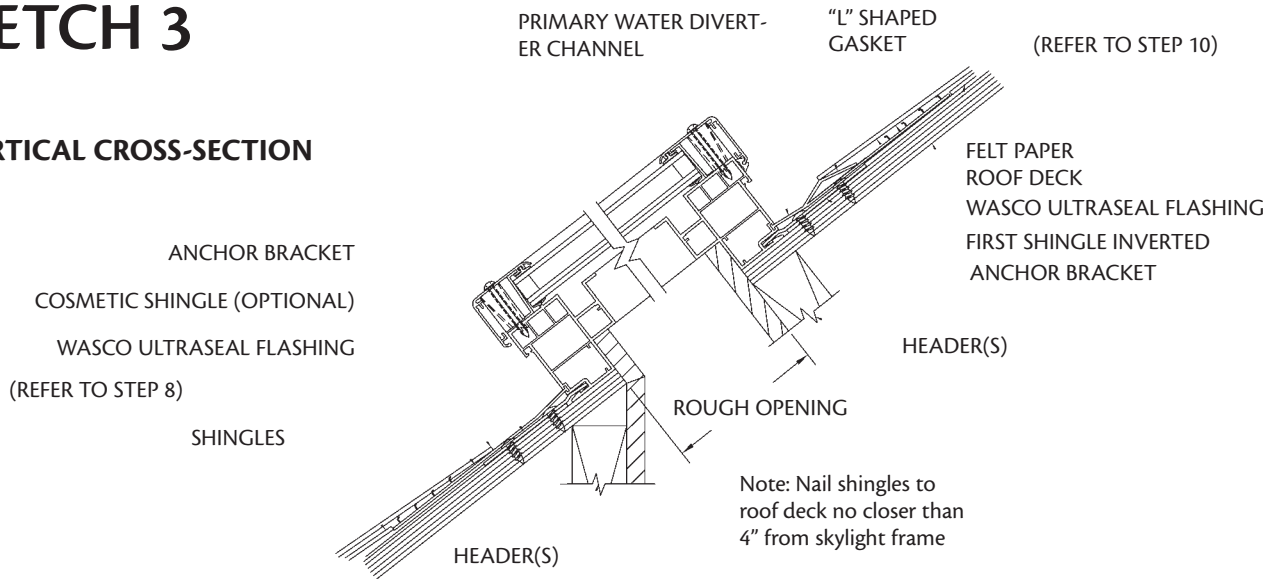
extends between the rough opening and the ceiling opening as shown in the illustration above. Apply sheetrock, paneling or other suitable cover. **NOTE:** Greater light transmission is obtained with white or light-colored shaft openings. Insulate behind the well as required. Finish off the well with any trim or molding you desire. Refer to Sketch 1.



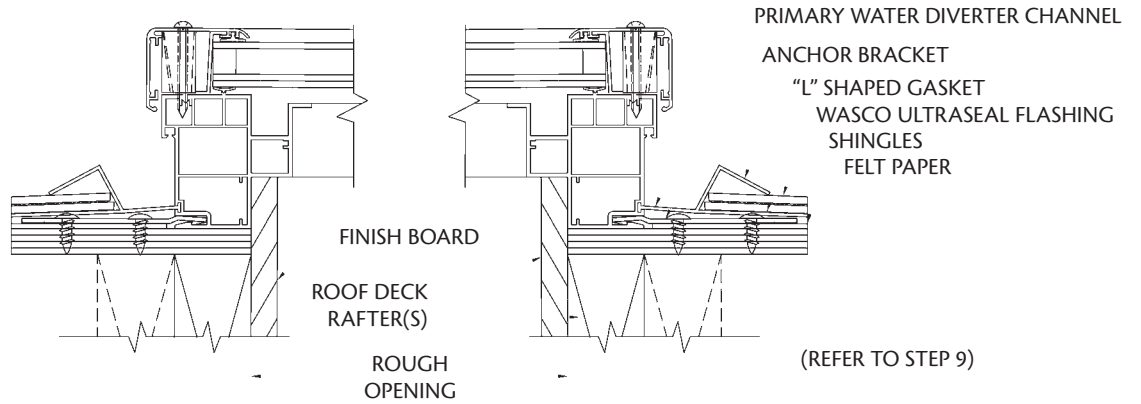
Be sure to allow for screen removal on vent units.

SKETCH 3

A. VERTICAL CROSS-SECTION

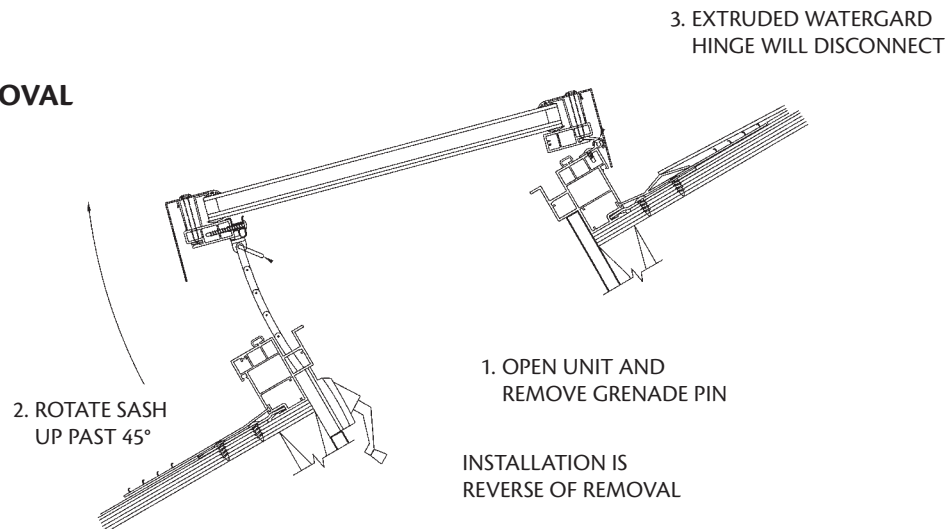


B. HORIZONTAL CROSS-SECTION



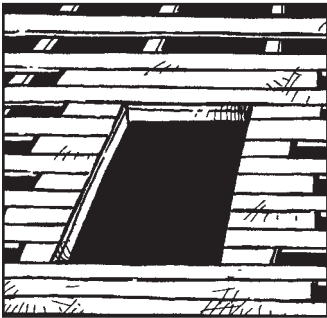
SKETCH 4

VENT UNIT SASH REMOVAL



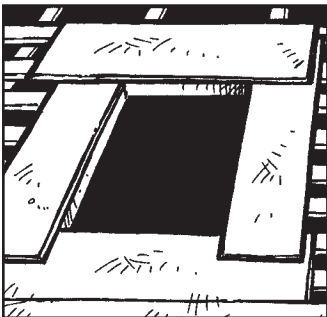
Wood Shakes Instructions Supplement

STEP 1



Block in around the rough opening approximately 12" to 18" as illustrated.

STEP 2

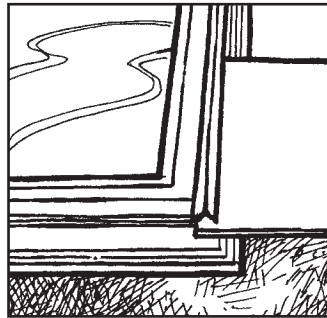


Lay down a base layer of felt paper around the opening.

STEP 3

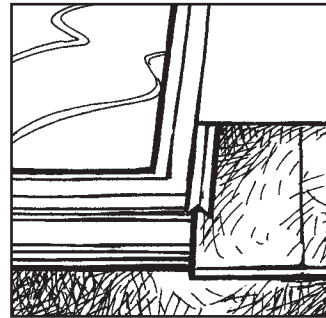
Position the skylight down over the opening and secure to the roof with anchor brackets. The Ultraseal flange should lay over the course of shakes along the lower edge.

STEP 4



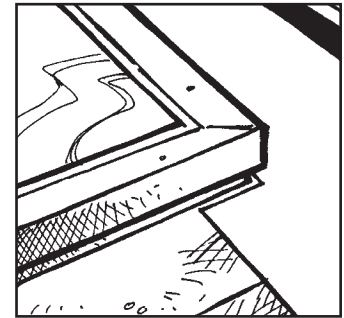
Along the side, the first layer of felt, which lies over the last course of shakes, is run under the L gasket. The first shake on the side is also positioned under the L gasket.

STEP 5

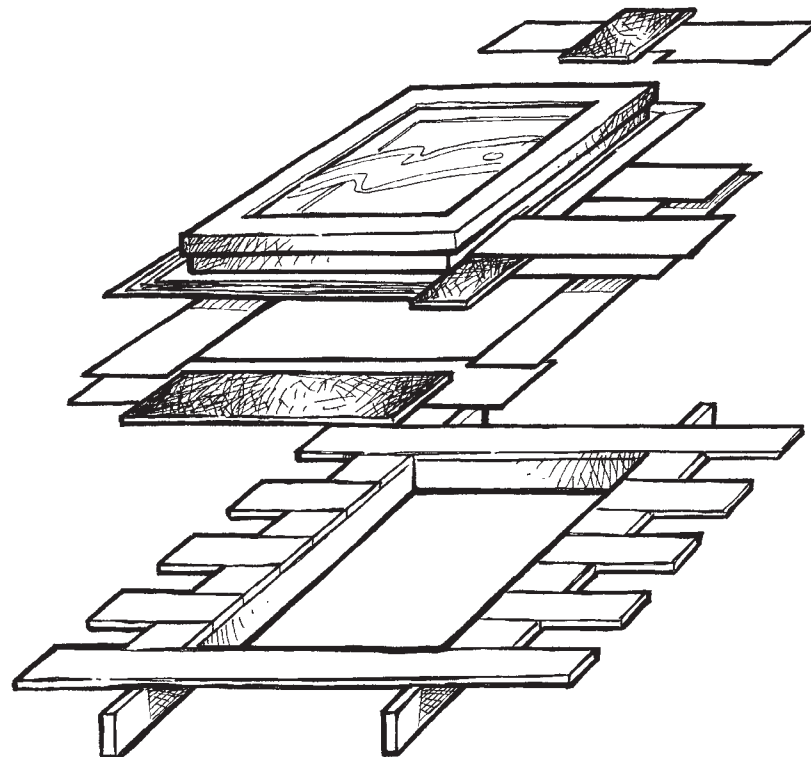


Subsequent layers of felt paper and wood shakes lie over the L gasket.

STEP 6



At the top, felt and shakes are placed over the L gasket. Continue to apply shakes up the roof.



Minimum Roof Pitch of 3" in 12" Required. Side by Side Only.

These instructions outline the proper procedure for installing a row of E-Class skylights side by side using Wasco Superseal. A distance of 10" between rough openings is required. This product can only be used with thin roofing materials such as asphalt/fiberglass and laminated/ architectural shingles on a minimum 3" in 12" roof pitch. Read these instructions thoroughly before beginning and also read the shingle unit instructions. The basic principles outlined in these instructions still apply for a good weathertight installation. Please call Wasco's Residential Division for assistance. 1-800-388-0293.

IMPORTANT NOTE – OVER/UNDER INSTALLATIONS

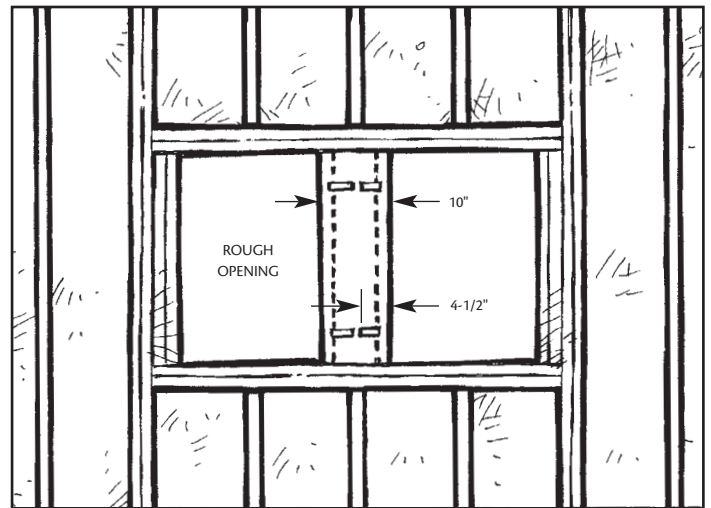
Over/under units must be installed with a minimum of 16" between rough openings. They are treated as separate units, meaning the lower unit is installed per the instructions supplied with it so that the shingles around the top of it continue up to the lower edge of the upper rough opening. The upper unit is then installed with its lower flange over these shingles and the installation is completed per the instructions supplied with the unit.

STEP 1

Prepare the rough openings as shown. Refer to the single unit instructions for rough opening sizes. Next install anchor brackets on the 10" wide roof section so that they are 4 1/2" back from the edge of the rough opening. Use the proper number of brackets for the size unit you are installing.

STEP 2

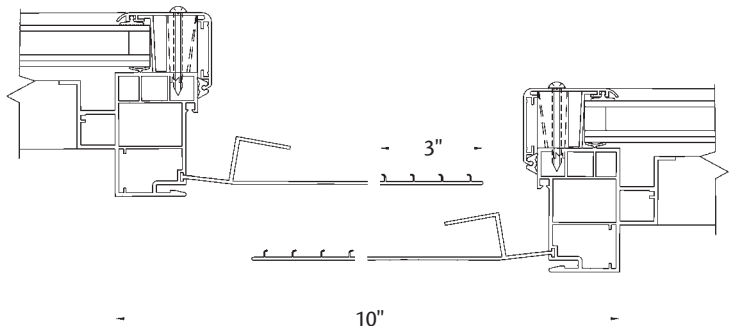
Cut two strips of Wasco Superseal 14 1/2" longer than your rough opening height. Remove the release paper from one side of a strip of Superseal and center it between the openings over the anchor brackets you just installed. Leave the top release paper intact.



THIS ILLUSTRATION IS A GUIDELINE ONLY SINCE EACH CASE IS UNIQUE IN TERMS OF STRUCTURAL LOAD REQUIREMENTS, FRAMING SIZE, RAFTER SPACINGS, SPAN LENGTH, SKYLIGHT SIZE, ETC. WASCO CAN IN NO WAY BE RESPONSIBLE FOR THE PARTICULAR CONSTRUCTION PRACTICES USED. AN ENGINEER OR ARCHITECT SHOULD BE CONSULTED WHENEVER A ROOF RAFTER IS TO BE CUT.

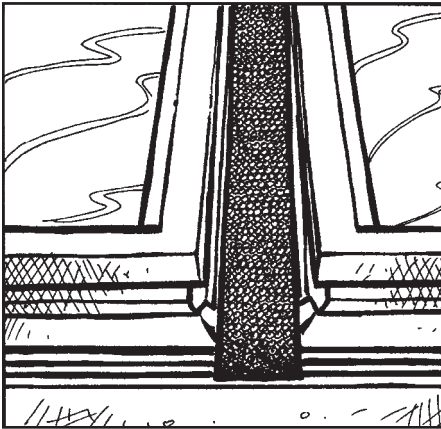
STEP 3

Cut the flanges of the adjoining units as shown to the right.



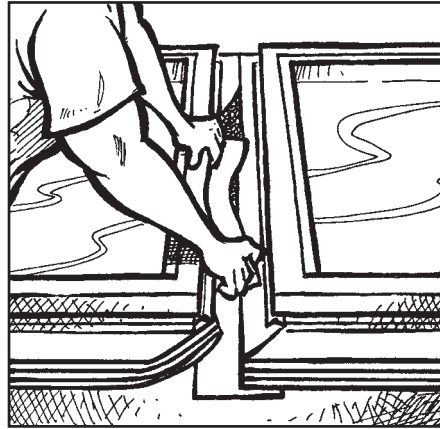
STEP 4

Place adjoining units over rough openings and slide into position so that the anchor brackets under the Superseal snap into the groove under the flange. Install anchor brackets on the remaining three sides of each unit. Remove the release paper from the top of the Superseal and press the two cut flanges onto it.



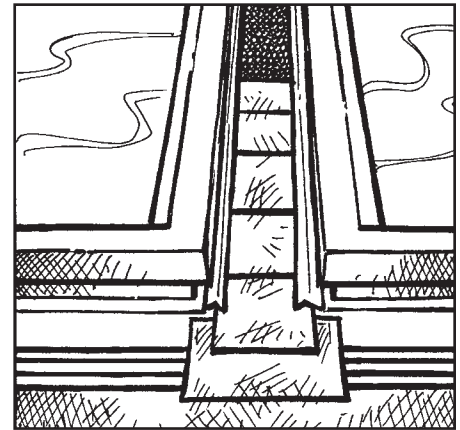
STEP 5

Remove the release paper from the other strip of Superseal and place it between the units on top of the abutting flanges.



STEP 6

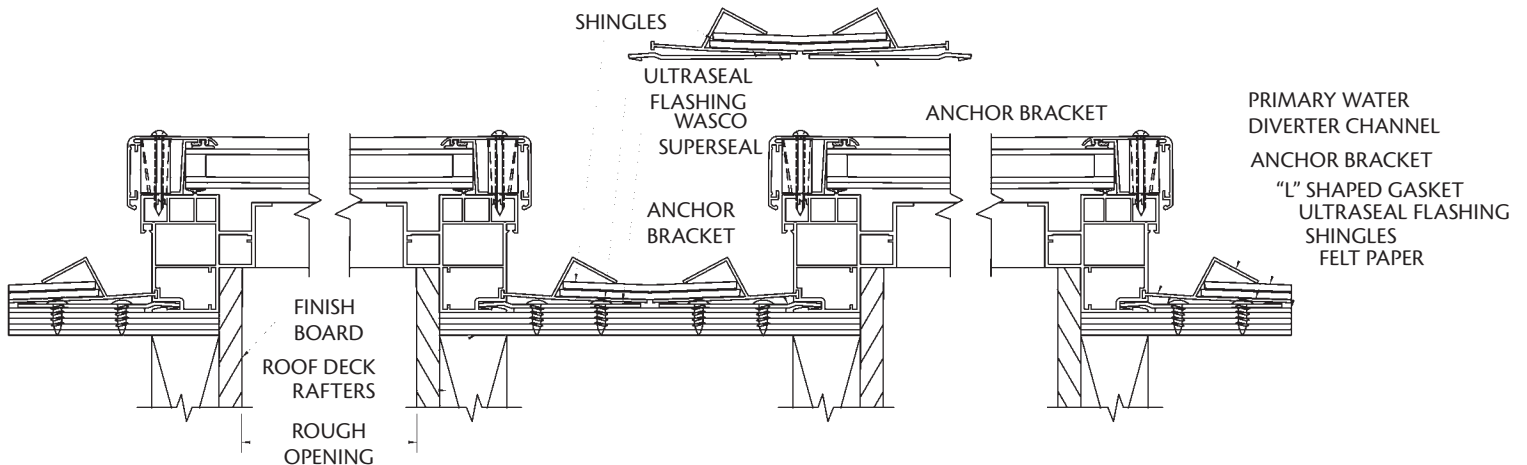
Shingle up between the units on the Superseal, removing the top release paper as you go up. Cut the shingles so that they fit under the primary water diverter channel on the skylight flanges. Fasten the shingles with one nail centered between the two units.



STEP 7

Finish the installation by following the E-Class instructions provided with the skylights.

HORIZONTAL CROSS-SECTION



ASPECTOS DE SEGURIDAD

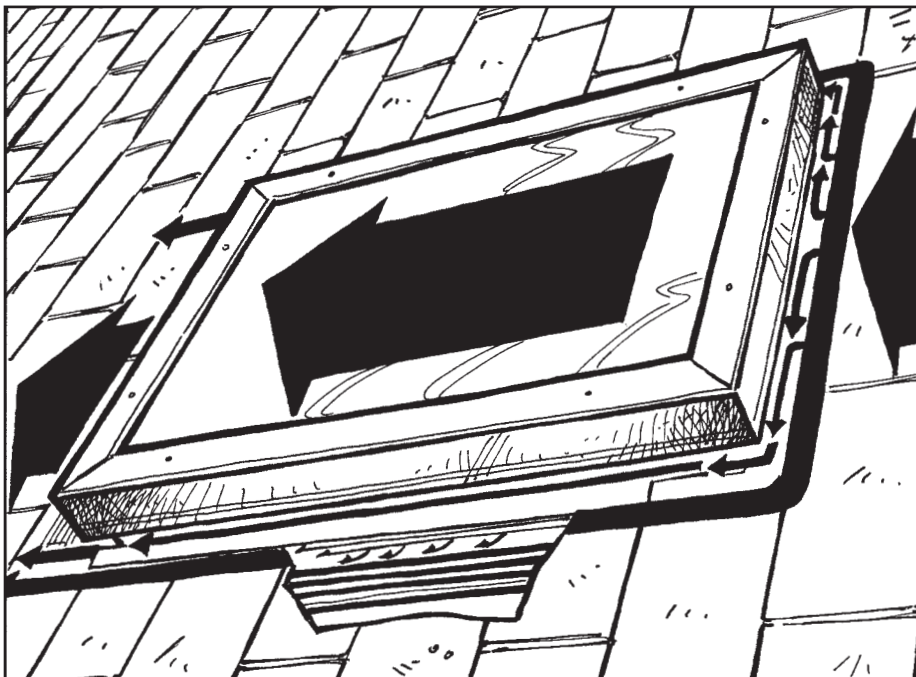
Aunque los tragaluzes Wasco han sido diseñados para soportar el peso de la nieve y el hielo, así como la fuerza de vientos normales, no están diseñados para soportar el peso de personas. Si la seguridad de las personas es motivo de consideración, los tragaluzes deberán estar protegidos por barandillas, rejillas o mallas.

LEA LAS INSTRUCCIONES

Tenga en cuenta la instalación y sepa de antemano si necesitará herramientas o materiales adicionales (por ejemplo, molduras decorativas de madera, paneles, etc.). Estudie la figura que aparece a la derecha y familiarícese con la manera en que funciona el nuevo sistema guardaguas Ultraseal de los tragaluzes E-Class. El conocimiento básico del funcionamiento de este guardaguas le ayudará a realizar un mejor trabajo de instalación.

Antes de instalar el tragaluz, tome tiempo para estudiar la construcción general de la abertura en el tejado, la abertura en el techo y el cubo de luz, a fin de asegurar que esté preparado para la tarea que realizará. Si es necesario unir unidades, comuníquese con Wasco para obtener instrucciones adicionales. Las instrucciones de instalación en tablillas de madera se presentan en la página trasera.

Se requiere un techo con pendiente mínima de 3" (76 mm) por cada 12" (305 mm)



PREPARATIVOS

Haga planes para realizar la instalación en un día seco y con clima tranquilo. Asegúrese de contar con ayuda para transportar el tragaluz al techo, y déjelo en el empaque para protegerlo. El nuevo sistema guardaguas Ultraseal de Wasco está fabricado con un material de plástico suave. PRECAUCIÓN: No levante la unidad por la ceja. Aunque el guardaguas es muy duradero, hay que tener cuidado de evitar el contacto con objetos filosos. El trabajo en el techo debe efectuarse de conformidad con todas las leyes y códigos de construcción aplicables, y siguiendo las buenas prácticas de techado.

LUGAR APROPIADO PARA TRAGALUCES

Aunque todos los tragaluzes Wasco están diseñados para colocarse manera conveniente en el espacio normal entre vigas, tal vez deba poner atención a las ventanas y puertas de los muros adyacentes y centrar el tragaluz de manera acorde. Al usar el tragaluz en una aplicación de techo y ventana, asegúrese de colocarlo de manera que la altura permita la mejor vista y operación. Recuerde también que el enmarcado para permitir un cabezal superior horizontal y un cabezal vertical de alféizar mejorará la dispersión de la luz.

La figura anterior muestra el corazón del ingenioso diseño del tragaluz E-Class: el sistema guardaguas Ultraseal. Este sistema tiene una ceja de vinilo flexible de 6" (15,2 cm) de ancho que se adapta a la forma del techo para formar un sello hermético, eliminando por completo la necesidad de utilizar selladores. Con Ultraseal, el borde rígido Permatherm, y la ceja de vinilo flexible se unen de manera permanente para formar un sistema guardaguas de una sola pieza.

La clave de una buena instalación de un tragaluz es mantener el agua fuera del techo, lo que los tragaluzes E-Class E logran gracias a una serie de canales de agua. El canal desviador primario redirige el agua del tragaluz a las tejas que se encuentran debajo. En el borde externo de la ceja, cuatro canales más pequeños completan el diseño impermeable a prueba de fallas.

El tragaluz E-Class le ahorrará tiempo y dinero, ya que puede instalarse en una cuarta parte del tiempo requerido para instalar tragaluzes que necesitan guardaguas por etapas o selladores. La instalación es más sencilla, ya que no se requieren complejos juegos de guardaguas ni sucio mastique para formar un sello impermeable con el techo.

HERRAMIENTAS Y MATERIALES

- Cinta métrica
- Escuadra de carpintero
- Plomada y tiza
- Martillo y clavos de techado
- Sierra caladora, serrucho y sierra circular
- Extractor de clavos de tejas, palanca
- Navaja multiusos
- Escalera de mano y soporte para techo
- Tejas adicionales y madera
- Tablero de yeso, compuesto para uniones y llana de enyesado
- Pintura y brochas
- Destornillador de estrella (Philips)

- Compruebe que el juego de herrajes incluido contenga los siguientes artículos:
- Soportes de anclaje, 10 (12 para el modelo 2270); núm. cat. 2091000
- Tornillo de cabeza troncocónica de 1", dos por soporte de anclaje; núm. cat. 1122201
- Tornillo para madera de 1 1/2", 2 (sólo ventilación); núm. cat. 1105701
- Manivela, 1 (sólo ventilación); núm. cat. 1101700

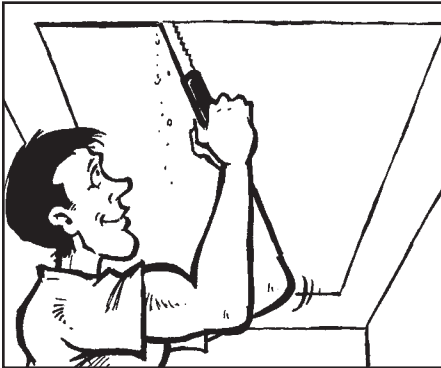
APLICACIONES RECOMENDADAS

Para utilizarse con materiales de techado delgados, como materiales compuestos, pizarra, tejas de madera y tablillas de hasta $\frac{3}{4}$ " (19 mm) de grosor. Juego de unión disponible para aplicaciones combinadas. No debe usarse en aplicaciones verticales. Llame al 1-800-388-0293 para obtener asistencia técnica.

PASO 1

Localice la abertura en el techo para el cubo de tragaluz que desee. Introduzca clavos en el techo desde el interior para localizar las cuatro esquinas de la abertura en el ático y marque el lugar con tiza. **NOTA:** Si encuentra cableado eléctrico o instalaciones de plomería en esta área, deberá cambiarlos de lugar antes de continuar.

PASO 2

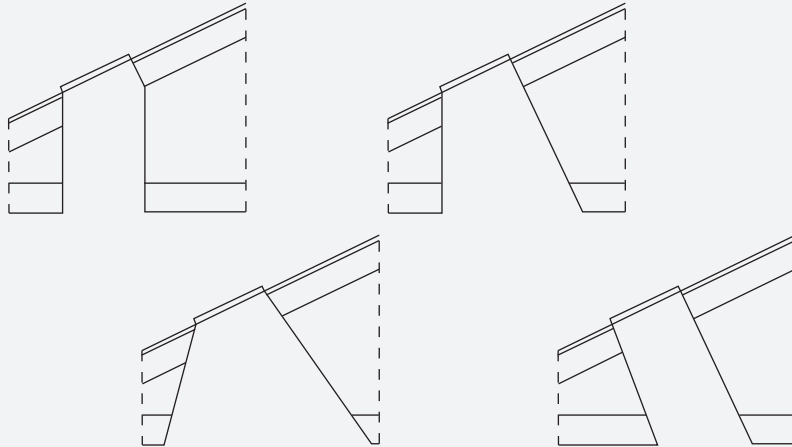


Corte la abertura en el techo con una sierra o con una navaja para tableros de yeso. Corte las viguetas del techo que estén dentro de la abertura y proporcione un soporte temporal. Enmarque la abertura con cabezales y viguetas, según requiera. **NOTA:** Para mantener la integridad estructural del techo, tal vez sea necesario utilizar cabezales, vigas y viguetas dobles.

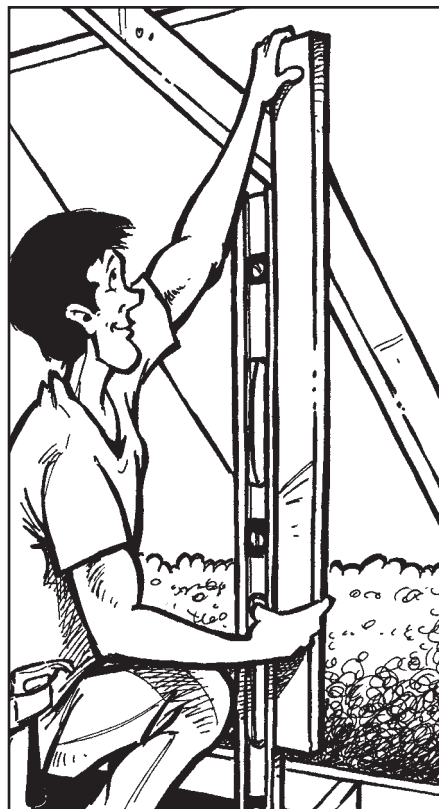


DIAGRAMA 1 ALTERNATIVAS DE CUBO DE LUZ

Asegúrese de tener en cuenta el desmontaje de la tela metálica en las unidades ventiladas.



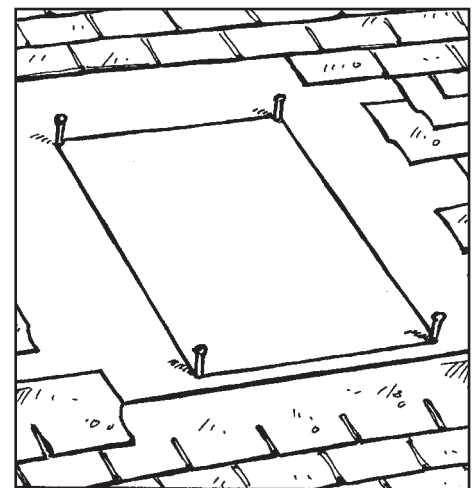
PASO 3



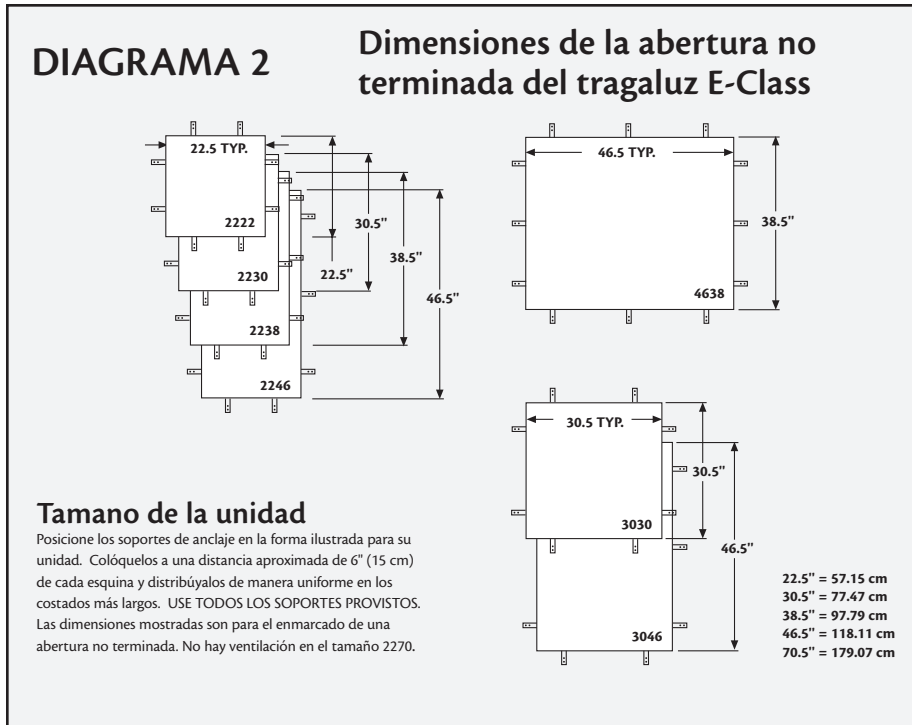
Localice las dos esquinas inferiores de la abertura del tragaluz en la parte inferior del techo, respecto de la abertura en el techo y el tipo de cubo. Marque estos puntos en el techado, introduciendo clavos. Desde los

dos clavos, mida la distancia apropiada según la unidad (vea el diagrama 3) para localizar las esquinas superiores de la abertura en el techado. Marque estas esquinas también con clavos.

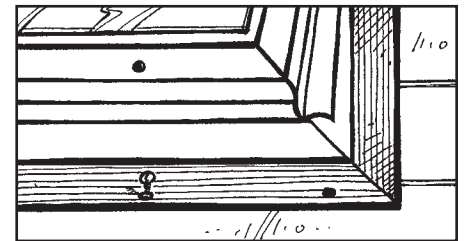
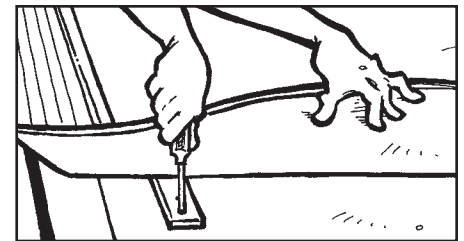
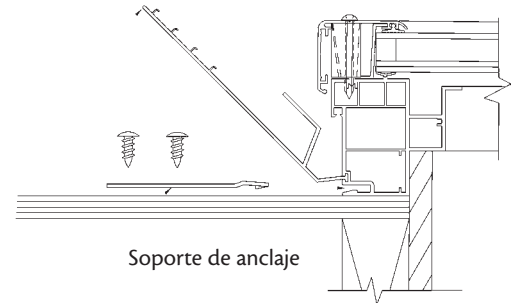
PASO 4



Pase al techado y use los cuatro clavos como guía para quitar las tejas (pero no el papel fieltro) hasta unas 12" (30 cm) más allá de la parte superior y los costados de la abertura en el techo (según indican los clavos), pero sólo 2" (5 cm) más allá del borde inferior.



PASO 8

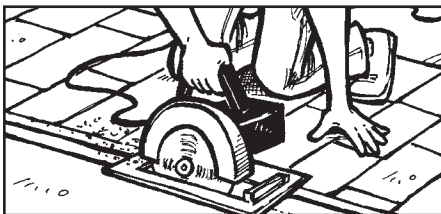


PASO 5

Use una línea de tiza o una regla para marcar la abertura en el tejado. Compare las dimensiones con las que se indican en el diagrama 2 y compruebe que las dimensiones diagonales sean iguales, a fin de asegurar que la abertura sea cuadrada. Se recomienda cortar 2" (5 cm) del papel fieltro antes de comenzar el paso 6.

necesario proveer un soporte temporal hasta que pueda instalar un cabezal. **NOTA:** Use una sierra circular y corte una ranura a 1 1/2" (38 mm) de la abertura, por encima de la viga que cortará. De esta manera podrá cortar la viga con un serrucho y dejar espacio para el cabezal.

PASO 6



Corte la abertura en el techo, siguiendo las marcas, y quite el material de techado. Si cortará una viga intermedia, tal vez sea

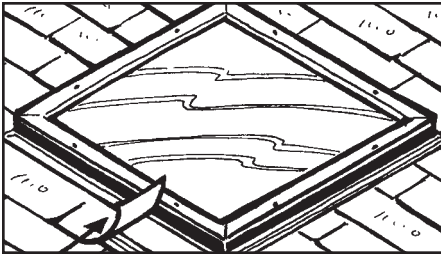
PASO 7



Enmarque la abertura con cabezales y vigas cortas. Al igual que con el techo, use cabezales y vigas dobles si requiere apoyo adicional. Limpie alrededor de la abertura para eliminar el aserrín y demás residuos.

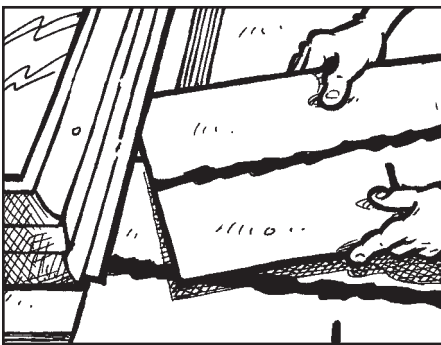
Enganche los soportes de anclaje de aluminio en su sitio en la muesca, directamente debajo del guardaguas Ultraseal. Use la separación mostrada en el diagrama 2. Centre la unidad sobre la abertura y sujétela en su sitio con los tornillos provistos, levantando el guardaguas Ultraseal para dejar expuestos los soportes. Asegúrese de deslizar los soportes hasta la posición correcta antes de sujetar. **NOTA:** Puede instalar bloques de madera temporales, que se extiendan por encima del techado en las dos esquinas superiores, para facilitar el posicionamiento del tragaluz.

IMPORTANTE: Al llegar a este punto, el guardaguas Ultraseal DEBE estar por encima de la fila inferior de tejas para que el agua drene de manera correcta a las tejas inferiores. Clave el borde inferior del guardaguas Ultraseal a la base del techo, utilizando clavos de techado separados aproximadamente 6" (15 cm), con uno en la punta de los dos superiores. Si lo desea, puede instalar tejas en el borde inferior del guardaguas, si prefiere que tenga ese aspecto.



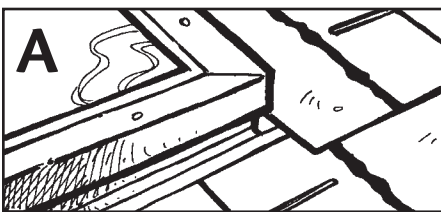
Teja cosmética

PASO 9

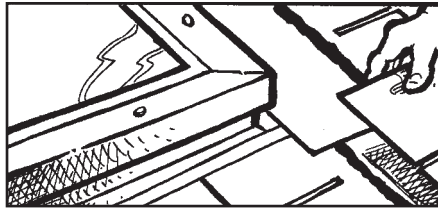


Vuelva a colocar tejas a lo largo de ambos costados del tragaluz. **IMPORTANTE:** Recorte las tejas para que quepan debajo de la junta en forma de "L" del guardaguas Ultraseal, como se muestra en el detalle B del diagrama 3. Esta junta sostiene las tejas firmemente contra el guardaguas y le da un aspecto terminado a la instalación. Si es necesario, recorte las tejas para que se ajusten a las esquinas superiores.

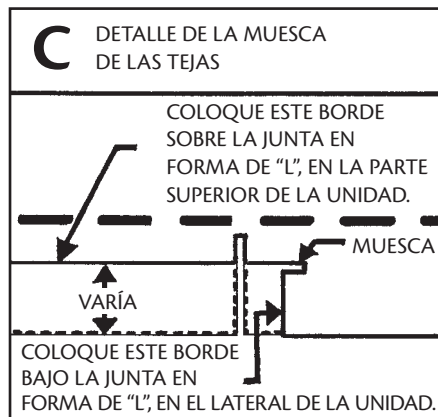
PASO 10



En la parte superior de la unidad, clave las tejas en forma invertida (mostradas en color rojo, con las lengüetas apuntando pendiente arriba) a todo lo ancho y por encima de el guardaguas, como se muestra en la ilustración A. **IMPORTANTE:** Coloque las tejas sobre la junta en forma de "L", como se ilustra en el detalle A del diagrama 3. El peso de las tejas hará presión sobre la junta para formar un canal de agua. El canal permite que el agua fluya alrededor del tragaluz hasta las tejas que están debajo.



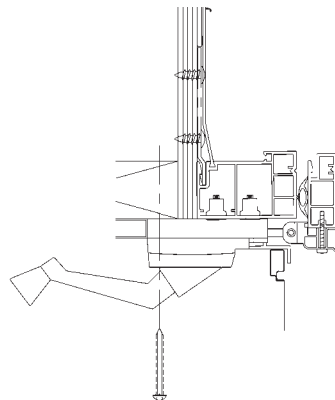
Después coloque las tejas (en posición normal) directamente sobre la fila de tejas invertidas (como se muestra en la ilustración B). De ser necesario, haga una muesca en la teja, como se muestra en la ilustración C.



Esta muesca facilita la transición desde el costado de la unidad, donde las tejas se colocan debajo de la junta en forma de "L", a la parte superior de la unidad, donde van encima de la junta. Siga colocando las tejas para completar la instalación.

PASO 11

(Sólo unidades con ventilación)

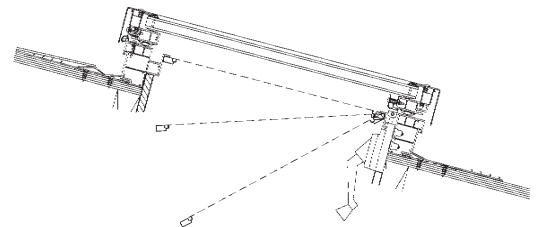


Una el mecanismo de operación al marco del cubo, utilizando los dos tornillos para madera provistos en el juego de herrajes. Consulte el diagrama 4 para quitar la banda de ventilación.

PASO 12



Desde el interior, enmarque el cubo, que se extiende entre la abertura no terminada y la abertura en el techo, como se muestra en la ilustración de la izquierda. Coloque un tablero de yeso, panel u otra tapa apropiada. **NOTA:** Se obtiene mayor transmisión de luz si la abertura del cubo es de color blanco o claro. Aísle detrás del cubo según se requiera. Termine el cubo con las molduras que desee.

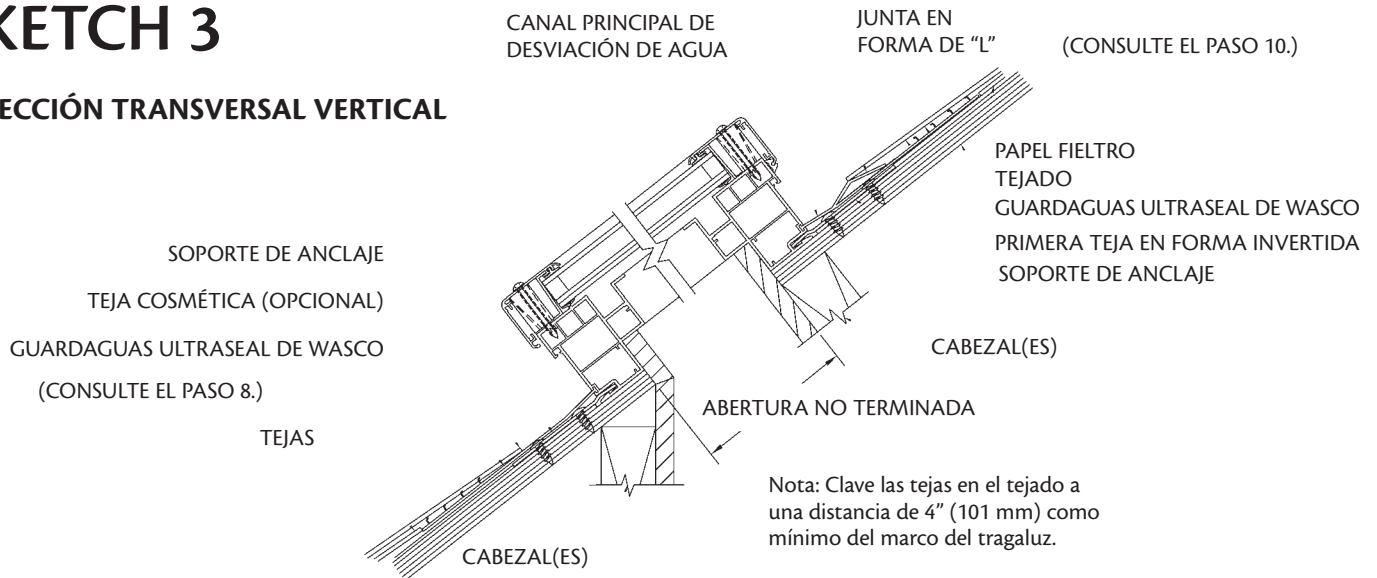


Asegúrese de tener en cuenta el desmontaje de la tela metálica en las unidades ventiladas.

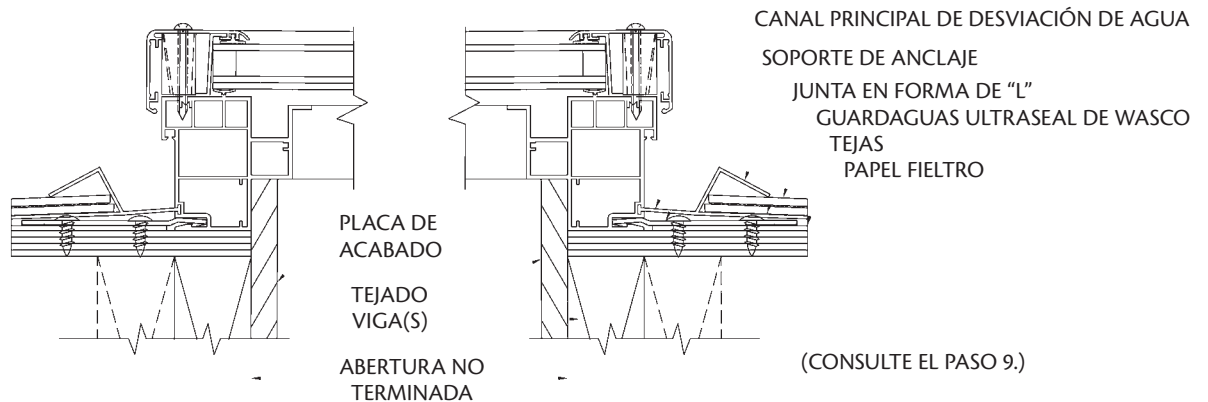
Consulte el diagrama 1.

SKETCH 3

A. SECCIÓN TRANSVERSAL VERTICAL

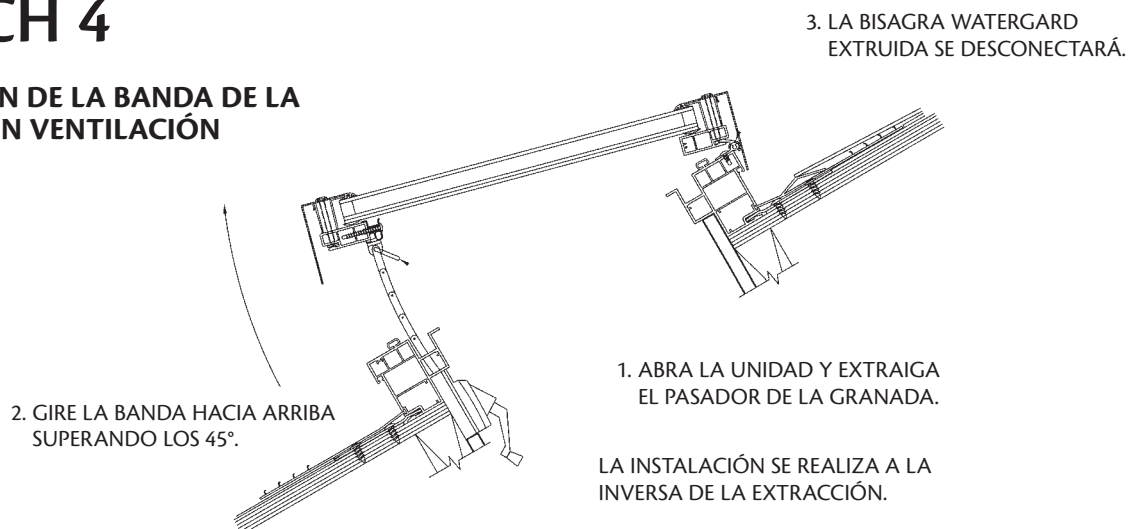


B. SECCIÓN TRANSVERSAL HORIZONTAL



SKETCH 4

EXTRACCIÓN DE LA BANDA DE LA UNIDAD CON VENTILACIÓN



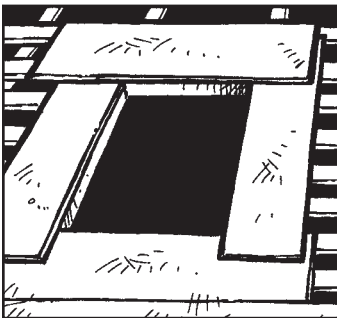
Suplemento de Instrucciones para Tabillas de Madera

PASO 1



Bloque alrededor de la abertura no terminada, a una distancia aproximada de 12" a 18" (30 a 45 cm), como se ilustra.

PASO 2

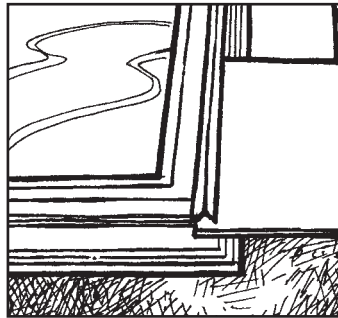


Coloque una capa base de papel fieltro alrededor de la abertura.

PASO 3

Coloque el tragaluz sobre la abertura y sujételo al techo con los soportes de anclaje. En el borde inferior, la caja del guardaguas Ultraseal debe quedar sobre la serie de tablillas.

PASO 4



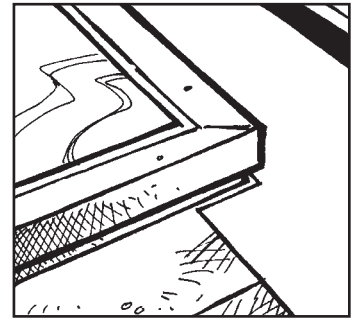
En el costado, la primera capa de fieltro, que descansa sobre la última serie de tablillas, se coloca debajo de la junta en forma de "L". La primera tablilla del costado también se coloca debajo de la junta en forma de "L".

PASO 5

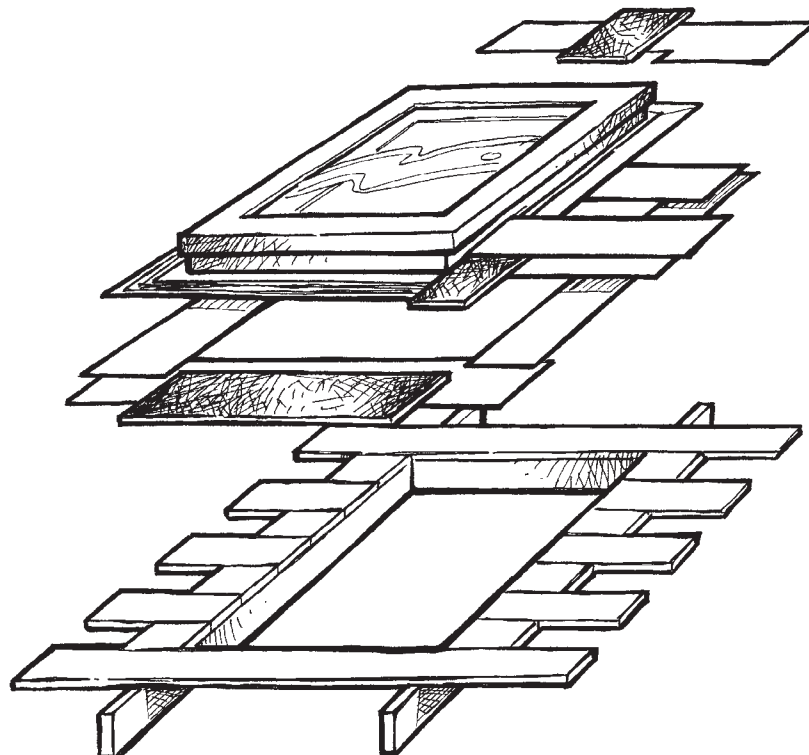


Las capas subsiguientes de papel fieltro y tablillas de madera se colocan sobre la junta en forma de "L".

PASO 6



En la parte superior, el fieltro y las tablillas se colocan sobre la junta en forma de "L". Siga colocando las tablillas en el techo.



Se requiere un techo con pendiente mínima de 3" (76 mm) por cada 12" (305 mm) Sólo lado a lado

Estas instrucciones describen el procedimiento correcto para instalar una fila de tragaluces E-Class lado a lado, utilizando un sello Wasco Superseal. Se requiere una distancia de 10" (25 cm) entre aberturas no terminadas. Este producto sólo puede usarse con materiales de techado delgados, como asfalto, fibra de vidrio y tejas laminadas o arquitectónicas, en techos con una pendiente mínima de 4" (10,2 mm) por cada 12" (305 mm). Lea estas instrucciones detenidamente antes de comenzar, y lea también las instrucciones de las tejas. Para lograr una buena instalación hermética, deben aplicarse los principios básicos descritos en estas instrucciones. Llame a la División Residencial de Wasco, al 1-800-388-0293, si requiere ayuda.

NOTA IMPORTANTE: INSTALACIONES DE UNIDADES SUPERIORES E INFERIORES

Las unidades inferiores y superiores deben instalarse con una distancia mínima de 16" (40 cm) entre aberturas no terminadas. Se tratan como unidades individuales, lo que significa que la unidad inferior se instala según las instrucciones entregadas con la unidad, de manera que las tejas alrededor de la parte superior continúan hasta el borde inferior de la abertura superior no terminada. Luego, se instala la unidad superior con la ceja inferior sobre estas tejas, y la instalación se completa conforme a las instrucciones entregadas con la unidad.

PASO 1

Prepare la abertura no terminada, como se ilustra. Consulte las instrucciones de cada unidad para conocer el tamaño de la abertura. Después, instale soportes de anclaje en la sección de 10" (25 cm) de ancho del techo, de manera que queden 4 1/2" (115 mm) detrás del borde de la abertura. Use el número apropiado de soportes para el tamaño de la unidad que está instalando.

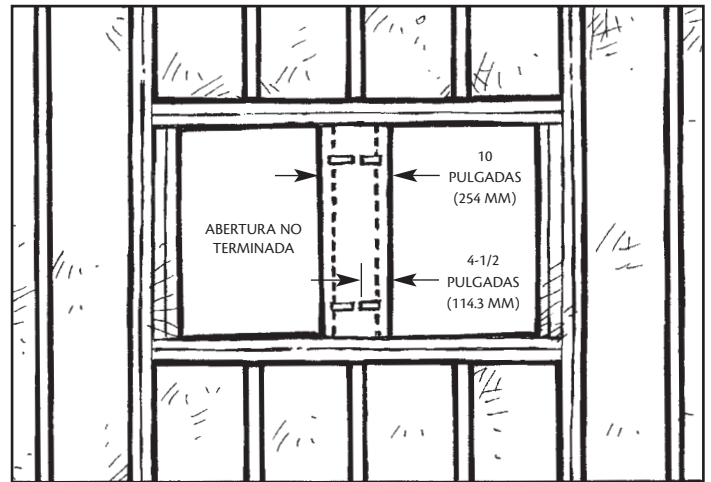
PASO 2

Corte dos tiras de sello Wasco Superseal, 14 1/2" (37 cm) más largas que la altura de la abertura. Quite el papel protector de un lado de la tira de sello Superseal y centre la tira entre las aberturas, sobre los soportes de montaje que acaba de instalar. No quite el papel protector superior.

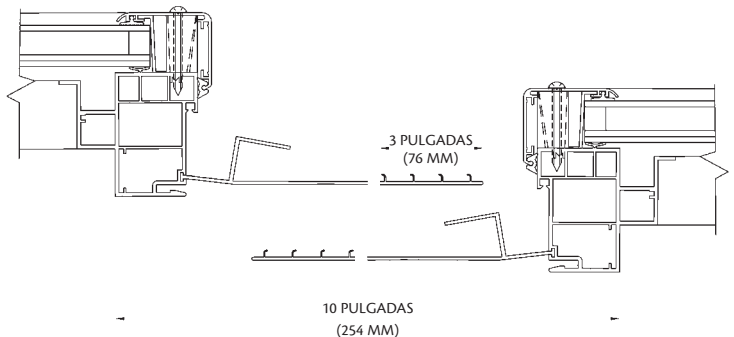


PASO 3

Corte las cejas de las unidades adjuntas, como se ilustra a la derecha.

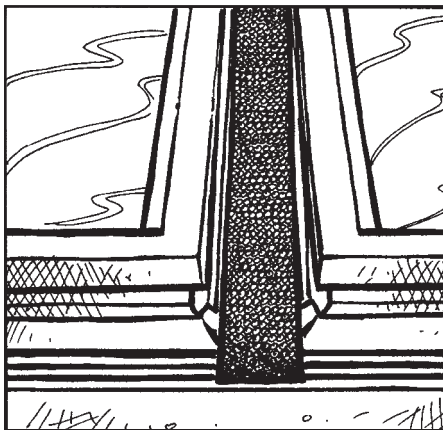


ESTA ILUSTRACIÓN ES SÓLO UNA PAUTA GENERAL, YA QUE CADA INSTALACIÓN ES ÚNICA EN CUANTO A REQUISITOS DE CARGA ESTRUCTURAL, TAMAÑO DEL MARCO, SEPARACIÓN ENTRE VIGAS, LONGITUD DE TRAMOS, TAMAÑO DE TRAGALUZ, ETC. WASCO NO PUEDE RESPONSABILIZARSE DE FORMA ALGUNA POR LOS MÉTODOS DE CONSTRUCCIÓN UTILIZADOS. DEBERÁ CONSULTARSE A UN INGENIERO O ARQUITECTO SI SE CORTARÁ UNA VIGA DEL TECHO.



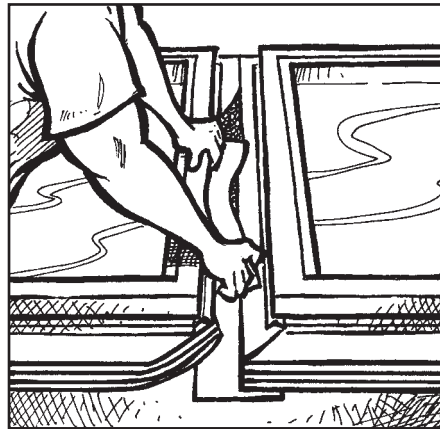
PASO 4

Coloque las unidades adjuntas sobre las aberturas y deslícelas a la posición correcta, de manera que los soportes de anclaje debajo del sello Superseal entren a presión en la ranura situada debajo de la ceja. Instale los soportes de anclaje en los otros tres lados de cada unidad. Quite el papel protector de la parte superior del sello Superseal y presione las dos cejas cortadas contra el sello.



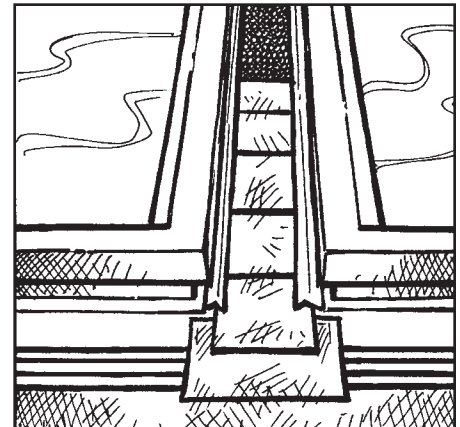
PASO 5

Quite el papel protector de la otra tira de sello Superseal y coloque la tira entre las unidades, sobre las cejas adjuntas.



PASO 6

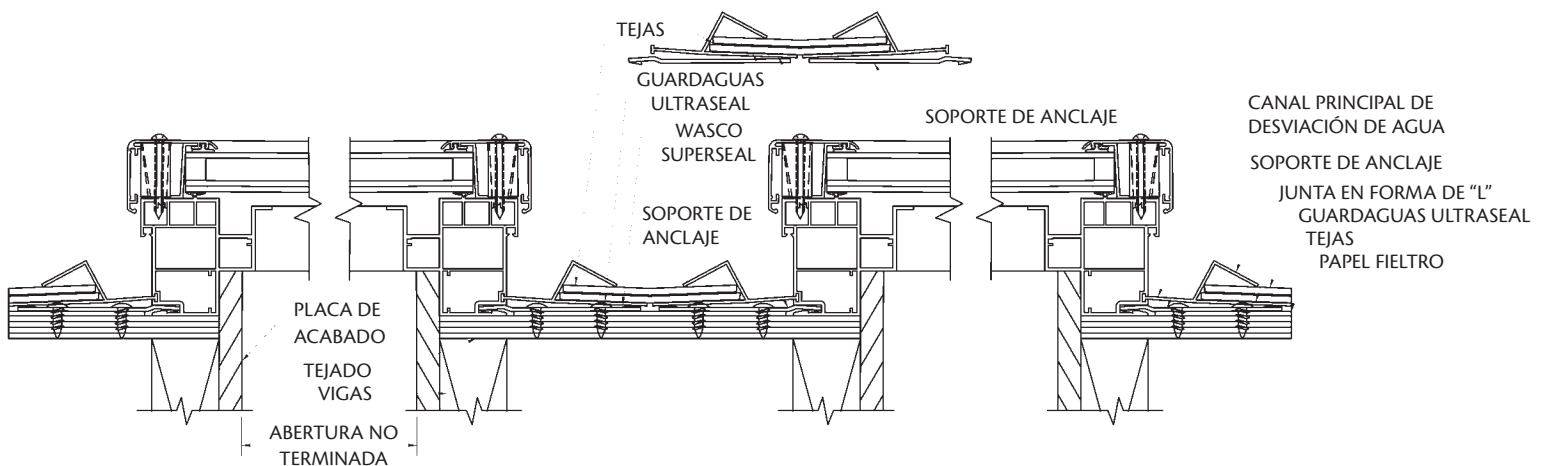
Coloque tejas entre las unidades, sobre el sello Superseal, quitando el papel protector superior a medida que suba. Corte las tejas para que quepan debajo del canal principal de desviación de agua en las cejas del tragaluz. Sujete las tejas con un clavo centrado entre las dos unidades.



PASO 7

Termine la instalación siguiendo las instrucciones provistas con los tragaluces E-Class.

SECCIÓN TRANSVERSAL HORIZONTAL

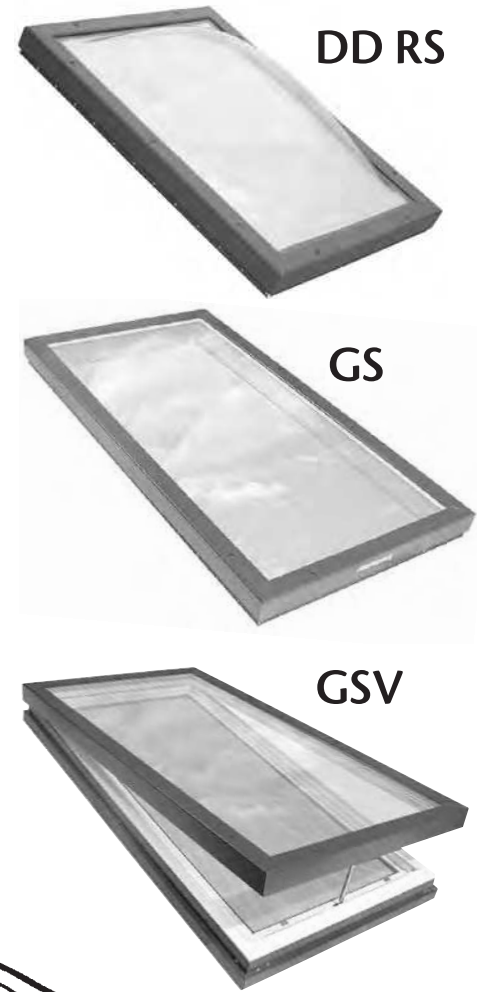


Minimum Roof Pitch of 3" in 12". Not for vertical applications.

SAFETY CONSIDERATIONS

While Wasco Skylights are designed to support the weight of snow, ice and the force of normal winds, they are not designed to withstand the weight of people. If human safety becomes considerations, skylights should be protected by railings, grids or screens.

READ THE INSTRUCTIONS. Proper installation is the key to a trouble-free skylight. Skylights must be installed with a roofing cement or Wasco Superseal installation kit. Use a high-quality, trowel consistency roof mastic. Do not use silicones or urethane sealants. Wasco Superseal may be purchased as a substitute for mastic. Every installation is unique and Wasco cannot control the conditions and the quality of the work that is done. Wasco assumes no responsibility for improper installation or noncompliance with all applicable building codes.



SECTION 1 – CURB CONSTRUCTION DETAILS

IMPORTANT NOTE: 1-1/2" – wide curb material and a standard rough opening will yield the above curb dimension. To use a wider curb, reduce the size of the rough opening accordingly.

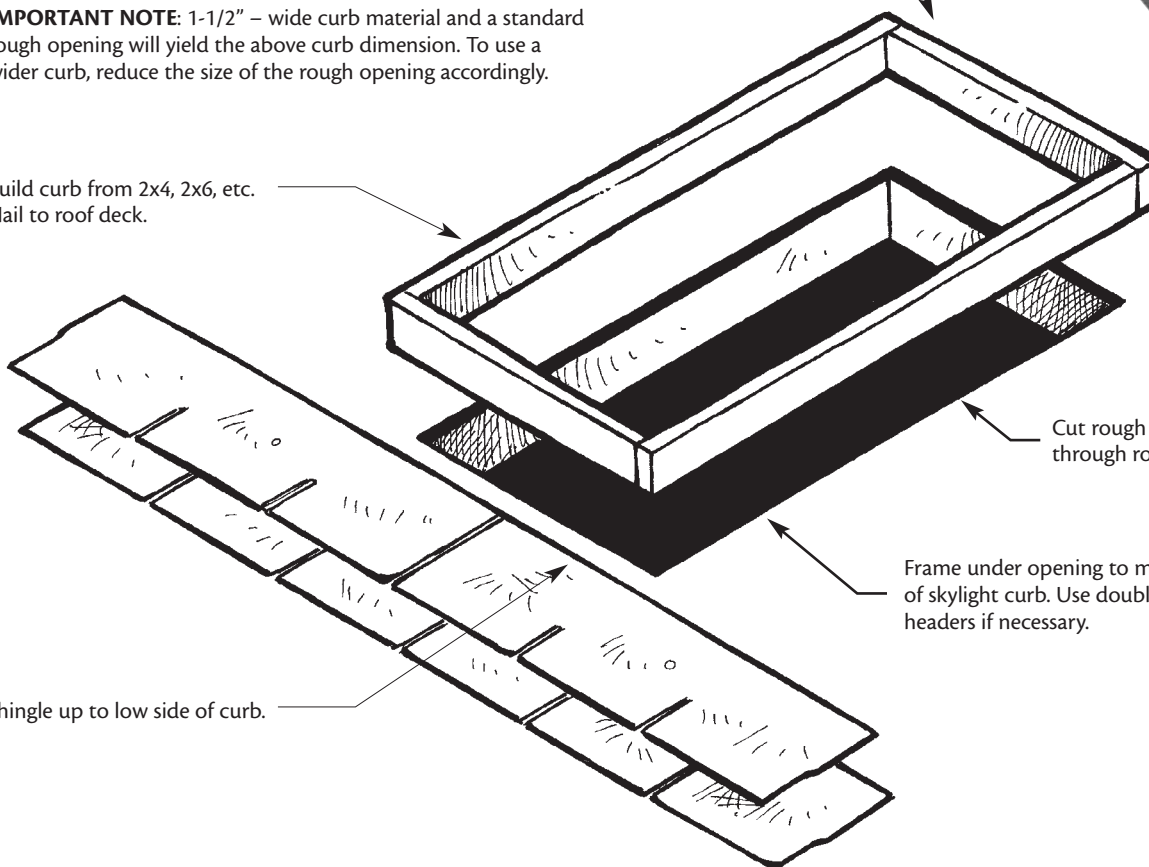
Build curb from 2x4, 2x6, etc.
 Nail to roof deck.

Do not exceed max.
 curb dimensions.

Cut rough opening
 through roof deck.

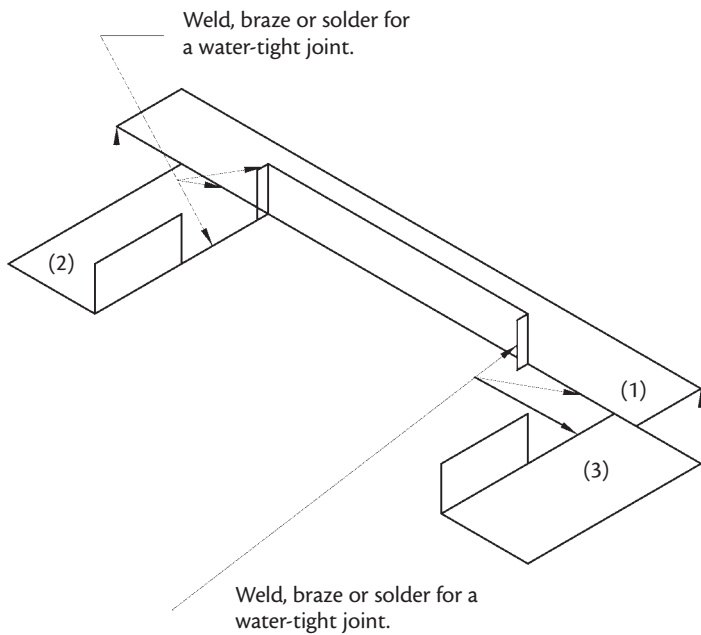
Frame under opening to match inside
 of skylight curb. Use double rafters and
 headers if necessary.

Shingle up to low side of curb.



SECTION 2 – FLASHING CONSTRUCTION DETAILS

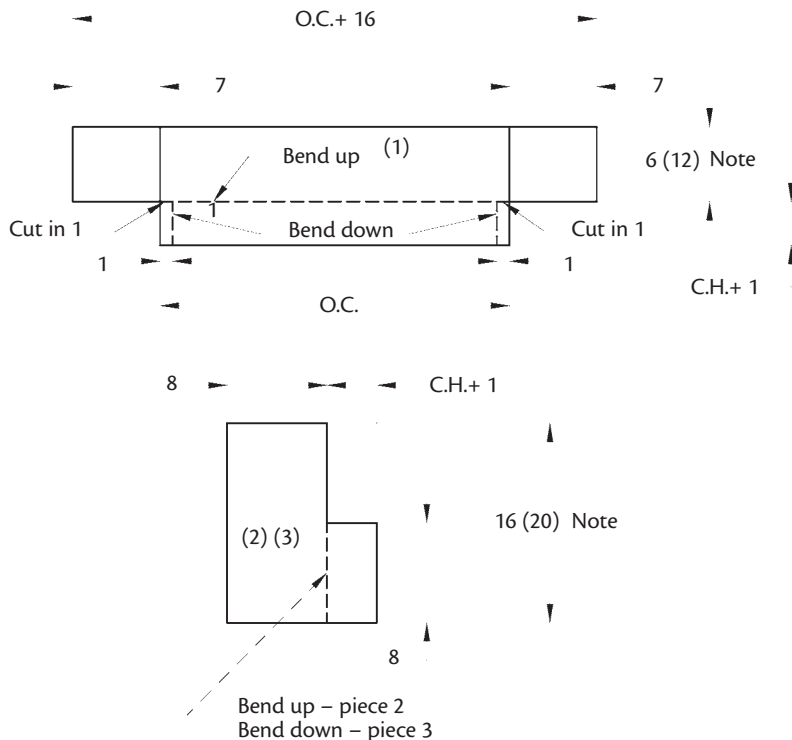
HEAD AND SILL DETAIL



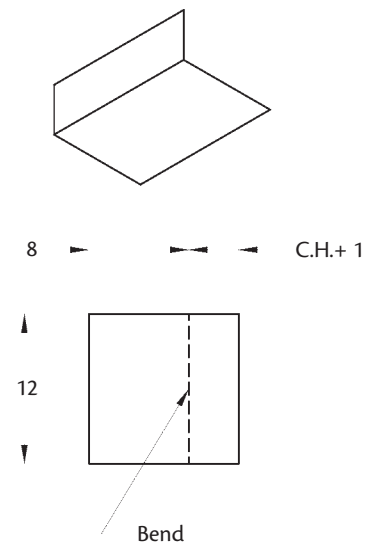
IMPORTANT NOTES

1. Head flange width should be increased to 12 or more for roof pitches less than 5 in 12
2. O.C. – Outside dimension of curb width
3. C.H. – Curb height
4. Dimensions are in inches
5. All bends are 90°

FLASHING MATERIALS	THICKNESS
COPPER	16 OZ
ALUMINUM	0.040"
STAINLESS STEEL	26 GA
GALVANIZED STEEL	24 GA



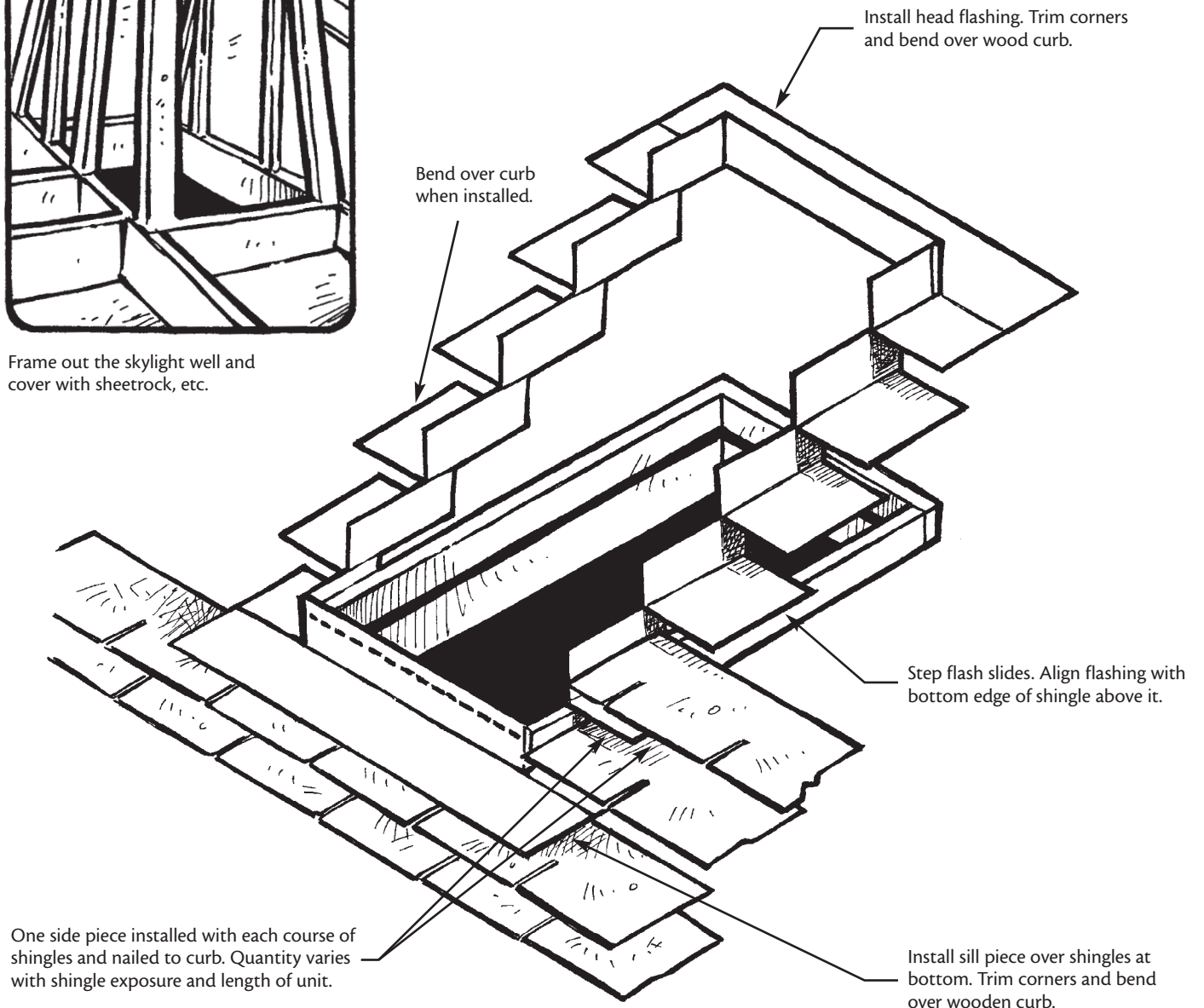
SIDE FLASHING DETAIL



SECTION 3 – FLASHING THE WOOD CURB

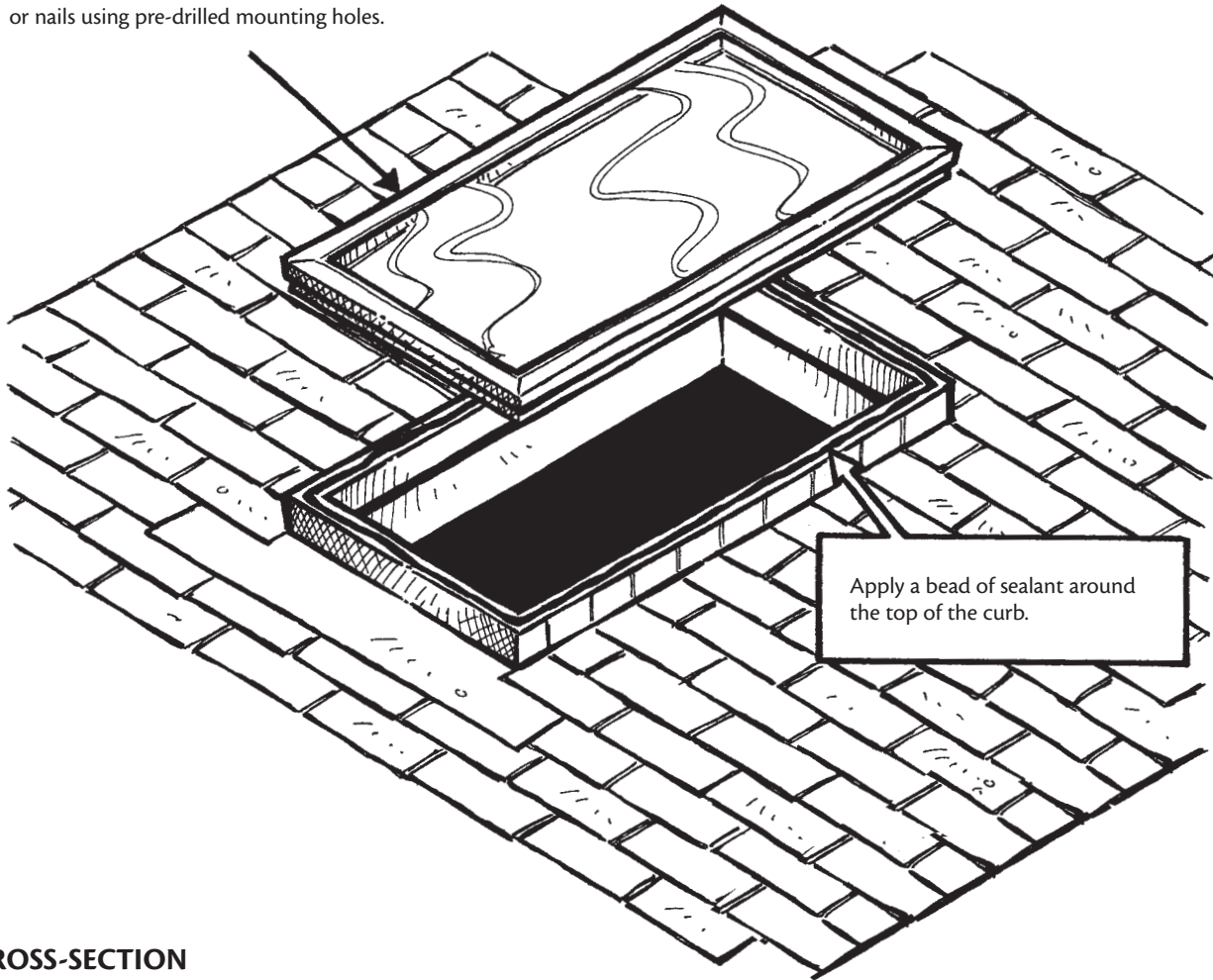


Frame out the skylight well and cover with sheetrock, etc.

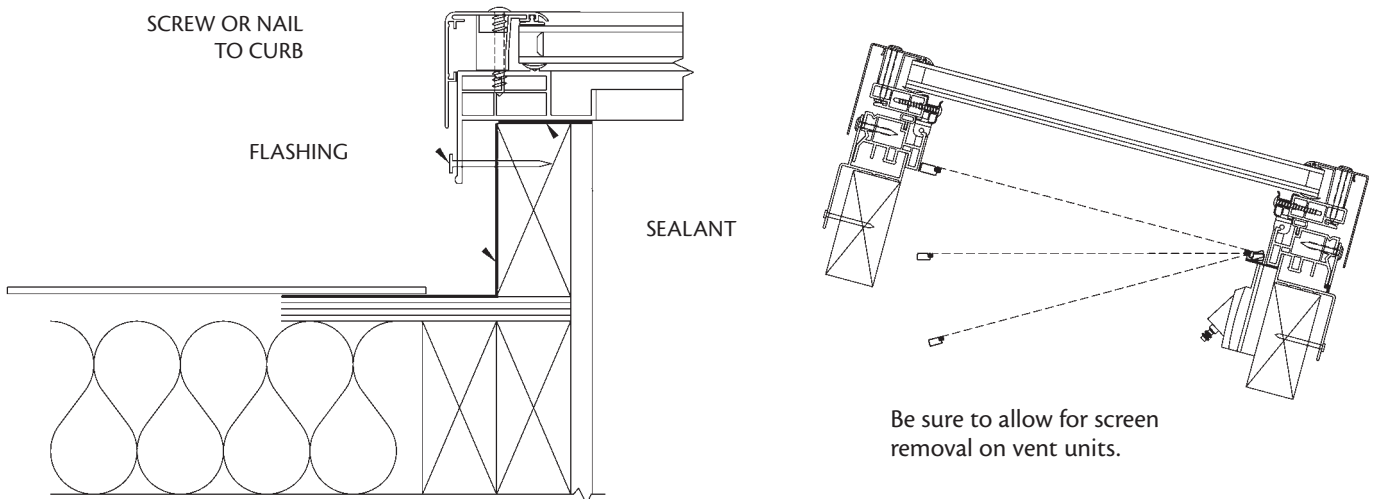


SECTION 4 – INSTALLING THE UNIT

Place unit on curb and attach with screws or nails using pre-drilled mounting holes.



CROSS-SECTION

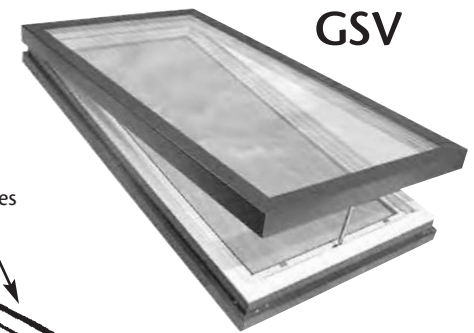
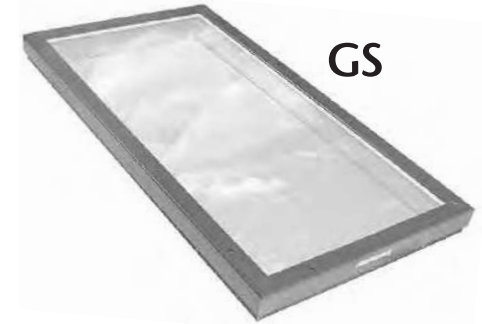


Pendiente Mínima del Techo de 3" (76 mm) por Cada 12" (305 mm). No Debe usarse en Aplicaciones Verticales.

ASPECTOS DE SEGURIDAD

Aunque los tragaluces Wasco han sido diseñados para soportar el peso de la nieve y el hielo, así como la fuerza de vientos normales, no están diseñados para soportar el peso de personas. Si la seguridad de las personas es motivo de consideración, los tragaluces deberán estar protegidos por barandillas, rejillas o mallas.

LEA LAS INSTRUCCIONES. La instalación correcta es la clave para tener un tragaluz libre de problemas. Los tragaluces deben instalarse con cemento de techado o con un juego de instalación Wasco Superseal. Use mastique para techos de alta calidad, con consistencia apropiada para llana. No use siliconas ni selladores de uretano. Puede comprar Wasco Superseal en lugar de mastique. Cada instalación es diferente y Wasco no puede controlar las condiciones ni la calidad del trabajo realizado. Wasco no asume ninguna responsabilidad por la instalación incorrecta o el incumplimiento de los códigos de construcción vigentes.



SECCIÓN 2: DETALLES DE CONSTRUCCIÓN DEL GUARDAGUAS

NOTA IMPORTANTE: Esta dimensión del borde se obtiene con material para bordes de 1-1/2" (38 mm) de ancho y una abertura no terminada estándar. Para usar un borde más ancho, reduzca el tamaño de la abertura en forma correspondiente.

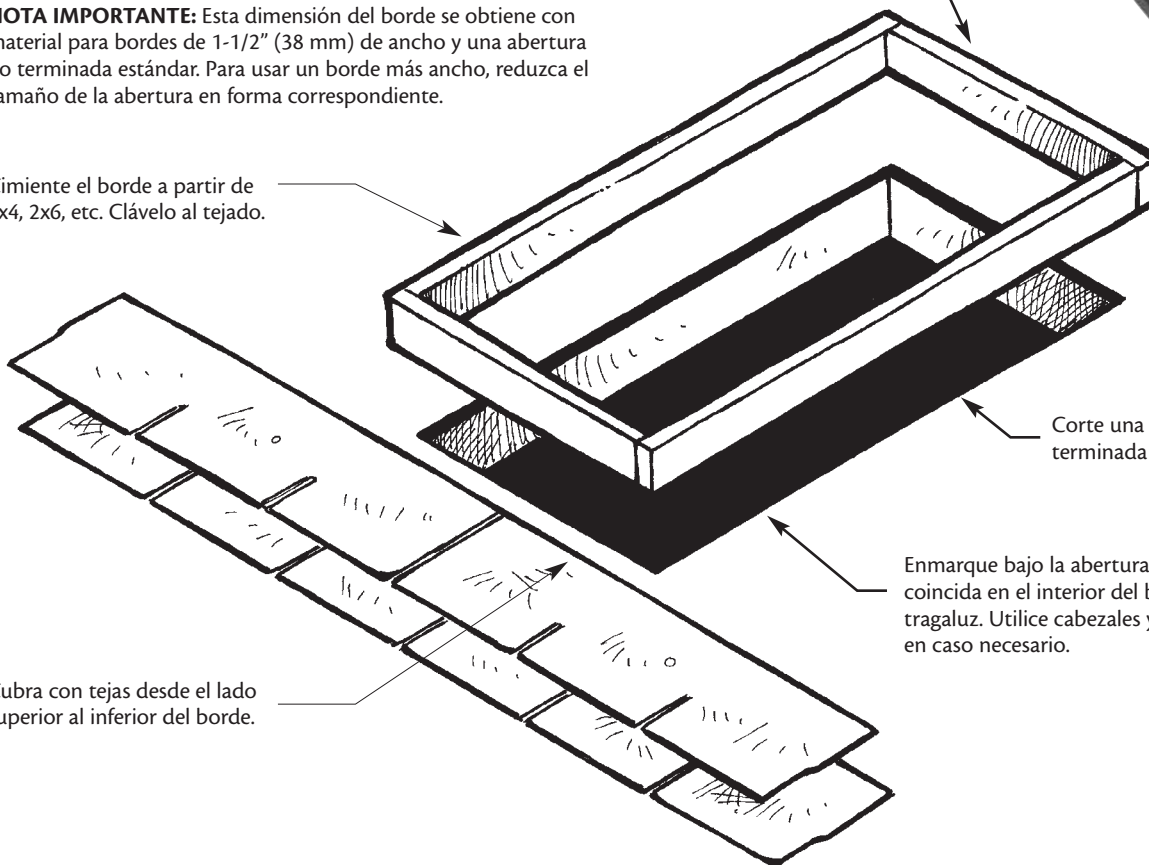
Cimiente el borde a partir de 2x4, 2x6, etc. Clávelo al tejado.

No supere las dimensiones máximas del borde.

Corte una abertura no terminada a través del tejado.

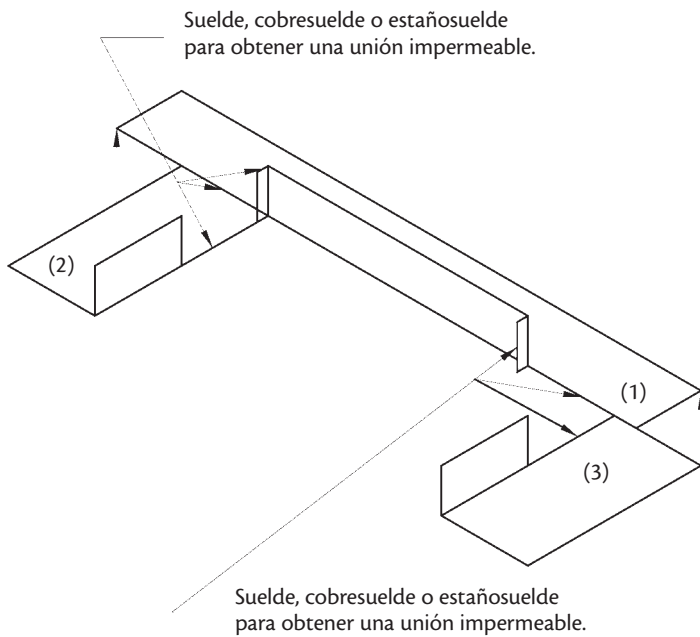
Enmarque bajo la abertura para que coincida en el interior del borde del tragaluz. Utilice cabezales y vigas dobles en caso necesario.

Cubra con tejas desde el lado superior al inferior del borde.



SECCIÓN 2: DETALLES DE CONSTRUCCIÓN DEL GUARDAGUAS

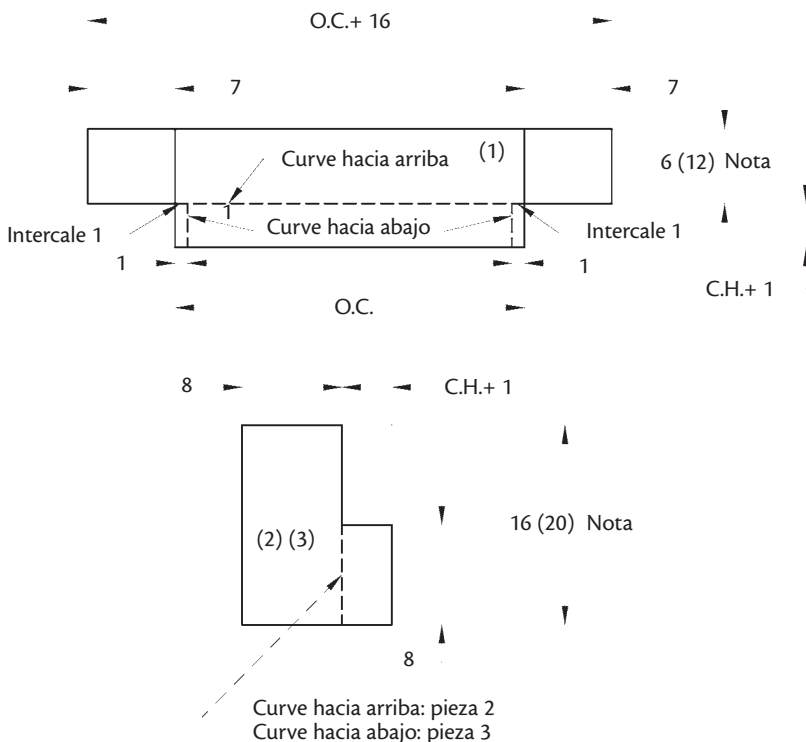
DETALLE DEL CABEZAL Y EL ALFÉIZAR



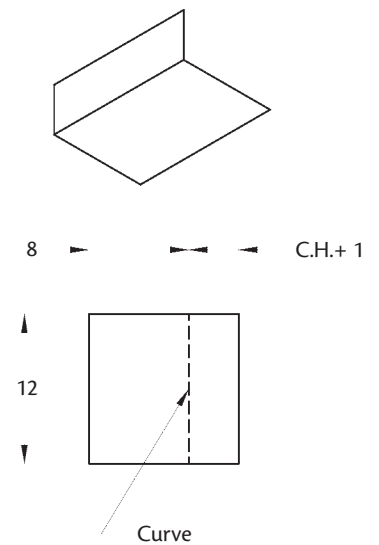
NOTAS IMPORTANTES

1. La anchura de la ceja de cabecera debe aumentar a 12 o más si la pendiente del techo es menor que 5" (127 mm) por cada 12" (305 mm)
2. O.C. = Dimensión exterior de la anchura del borde
3. C.H. = Altura del borde
4. Las dimensiones se presentan en pulgadas
5. Todas las curvaturas son de 90°

MATERIALES DEL GUARDAGUAS	GROSOR
COBRE	16 OZ
ALUMINIO	0.040"
ACERO INOXIDABLE	26 GA
ACERO GALVANIZADO	24 GA



DETALLE DEL GUARDAGUAS LATERAL



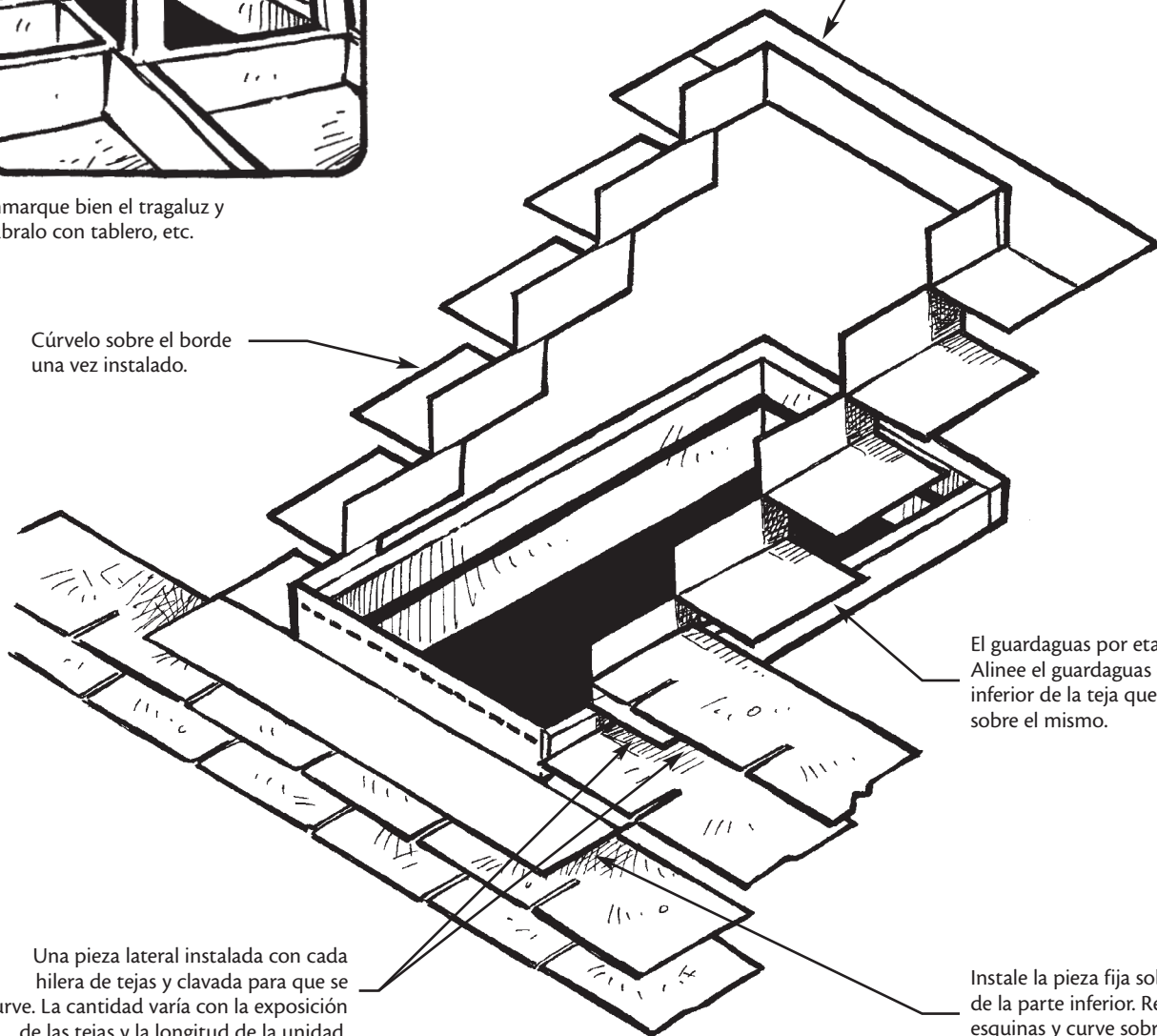
SECCIÓN 3: GUARDAGUAS DEL BORDE DE MADERA



Enmarque bien el tragaluz y cúbralo con tablero, etc.

Cúvelo sobre el borde una vez instalado.

Instale el guardaguas de la cabecera. Recorte las esquinas y cúvelo sobre el borde de madera.



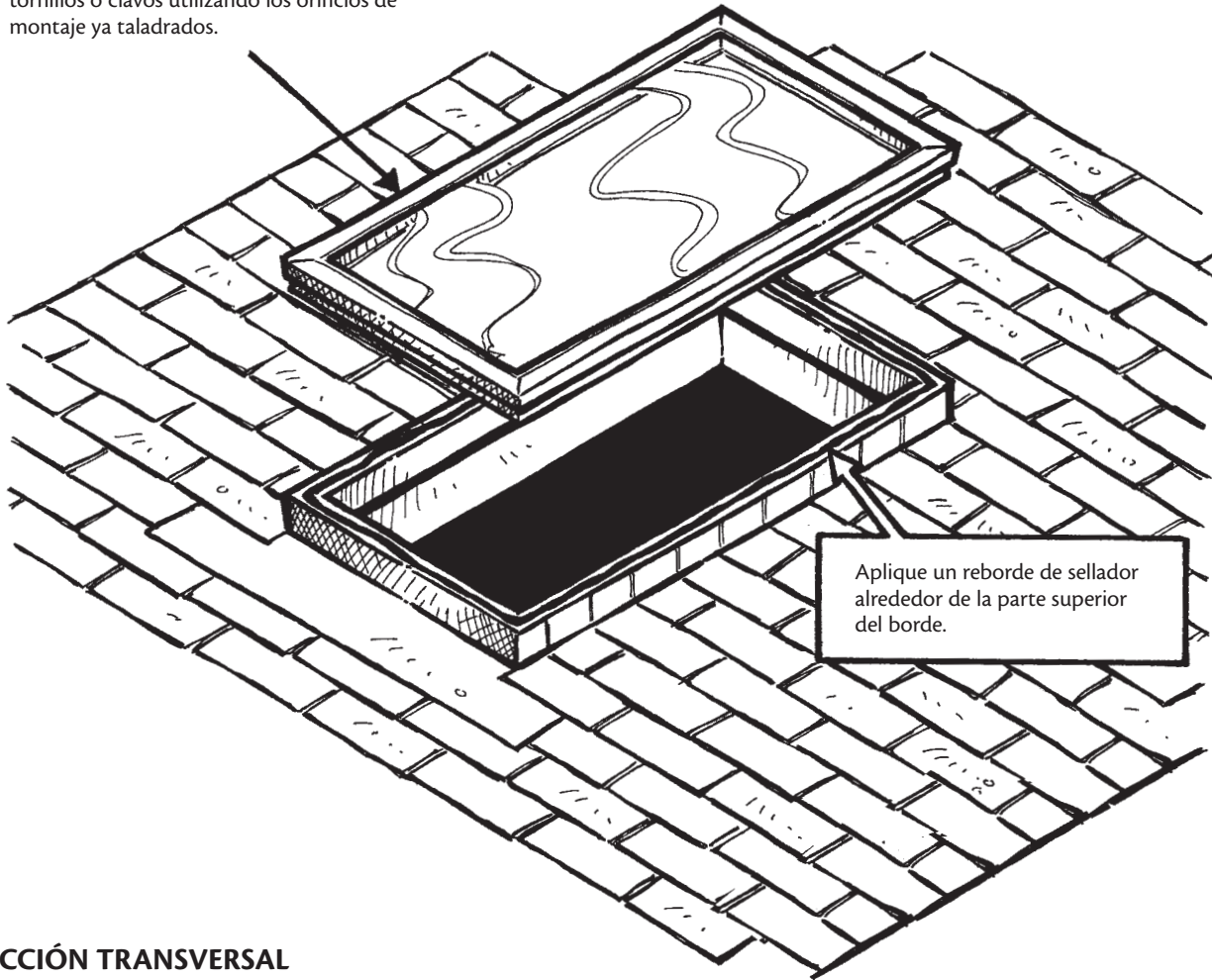
El guardaguas por etapas se desliza. Alinee el guardaguas con el borde inferior de la teja que se encuentra sobre el mismo.

Una pieza lateral instalada con cada hilera de tejas y clavada para que se curve. La cantidad varía con la exposición de las tejas y la longitud de la unidad.

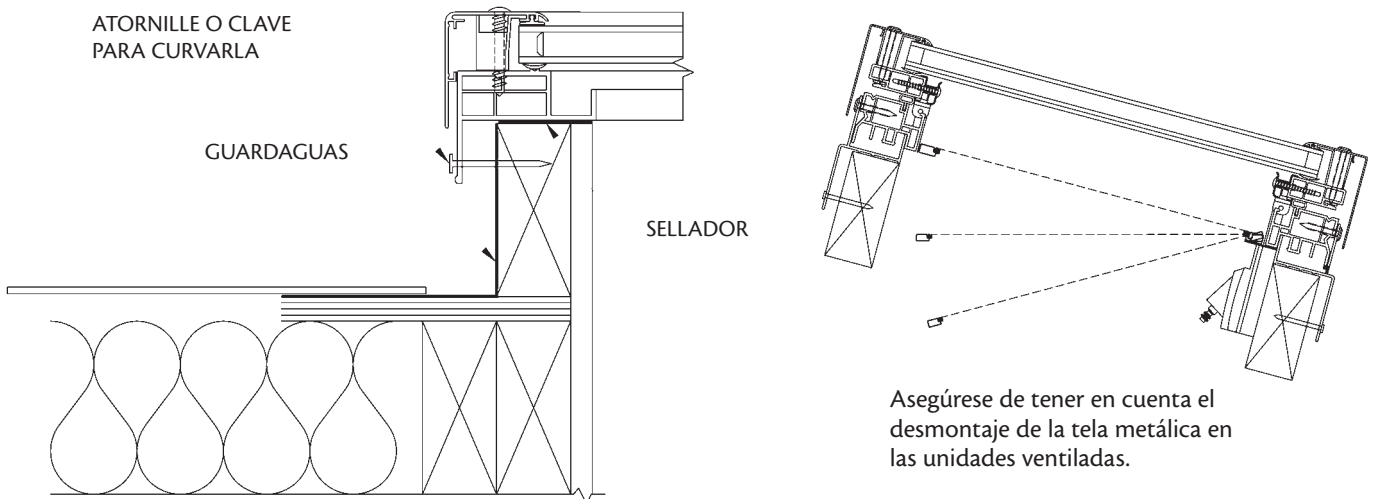
Instale la pieza fija sobre las tejas de la parte inferior. Recorte las esquinas y curve sobre el borde de madera.

SECCIÓN 4: INSTALACIÓN DE LA UNIDAD

Sitúe la unidad en el borde y únala con tornillos o clavos utilizando los orificios de montaje ya taladrados.



SECCIÓN TRANSVERSAL



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GSHR

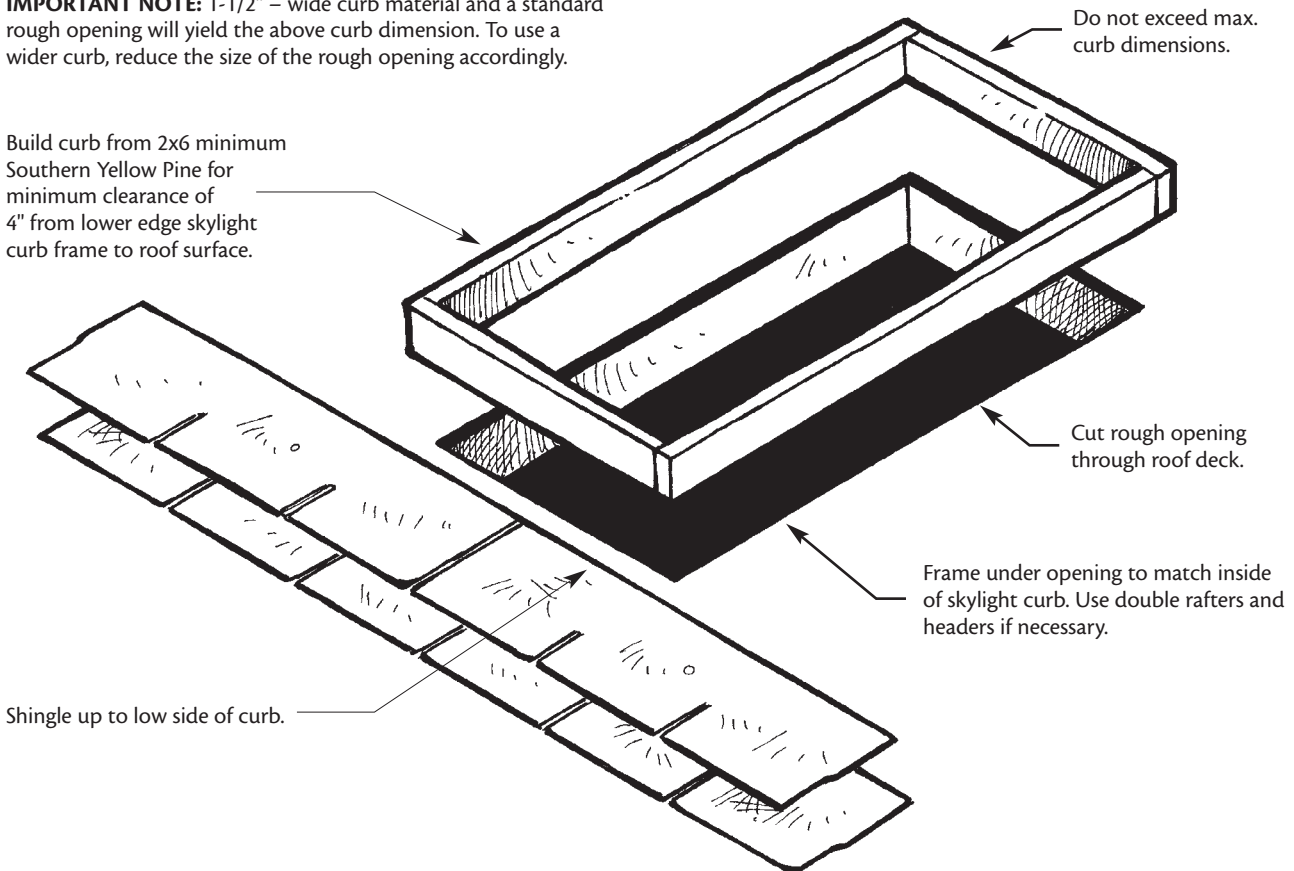
SECTION 1 CURB CONSTRUCTION DETAILS

UNIT OF DIMENSION (WIDTH OR LENGTH)	22	30	46
MAXIMUM OUTSIDE CURB DIMENSION	25-1/2"	33-1/2"	49-1/2"

GSHR Unit carries Miami-Dade NOA #04-0728.03 (expiration October 20, 2010) and complies with Florida Building Code including the High Velocity Hurricane Zone.

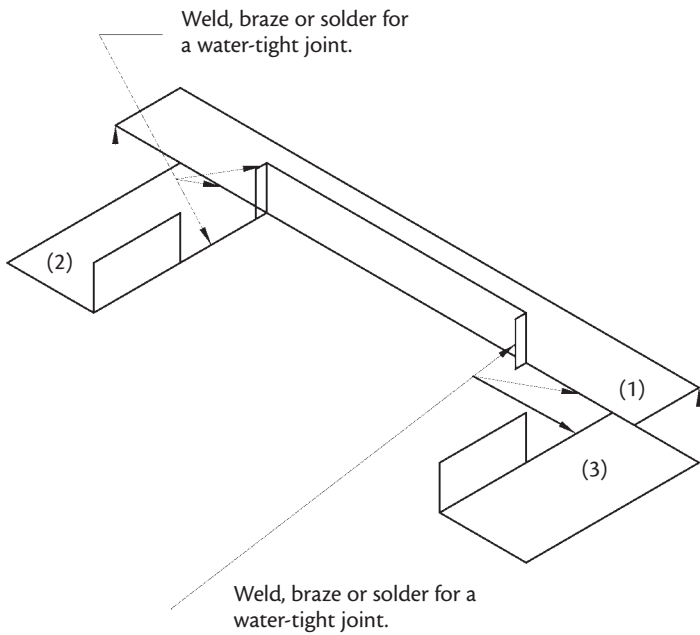
IMPORTANT NOTE: 1-1/2" – wide curb material and a standard rough opening will yield the above curb dimension. To use a wider curb, reduce the size of the rough opening accordingly.

Build curb from 2x6 minimum Southern Yellow Pine for minimum clearance of 4" from lower edge skylight curb frame to roof surface.



SECTION 2 – FLASHING CONSTRUCTION DETAILS

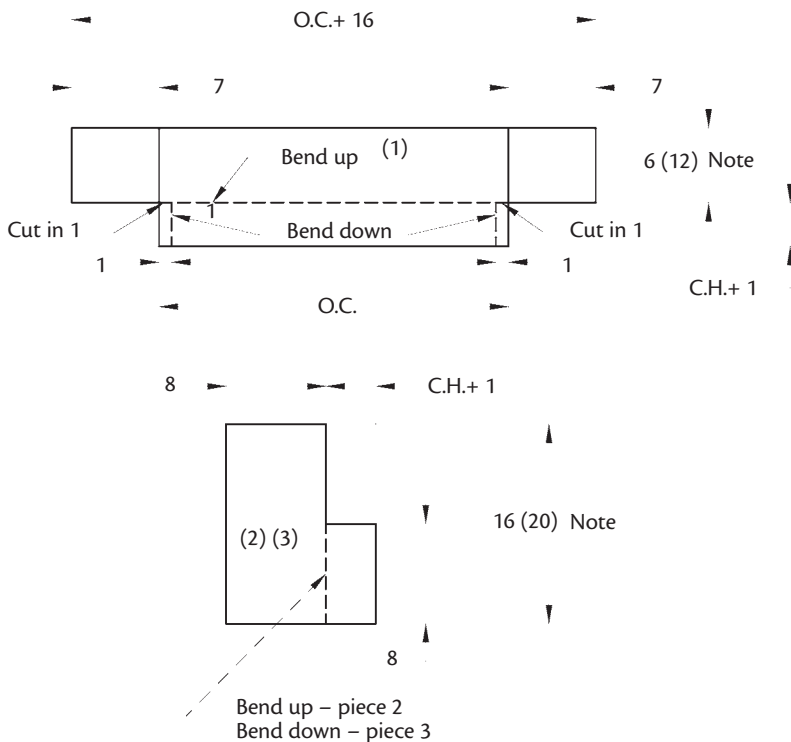
HEAD AND SILL DETAIL



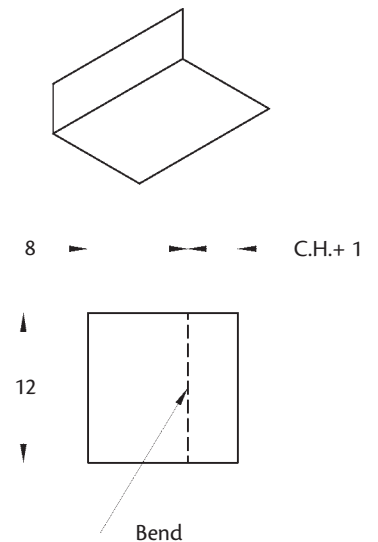
IMPORTANT NOTES

1. Head flange width should be increased to 12 or more for roof pitches less than 5 in 12
2. O.C. – Outside dimension of curb width
3. C.H. – Curb height
4. Dimensions are in inches
5. All bends are 90°

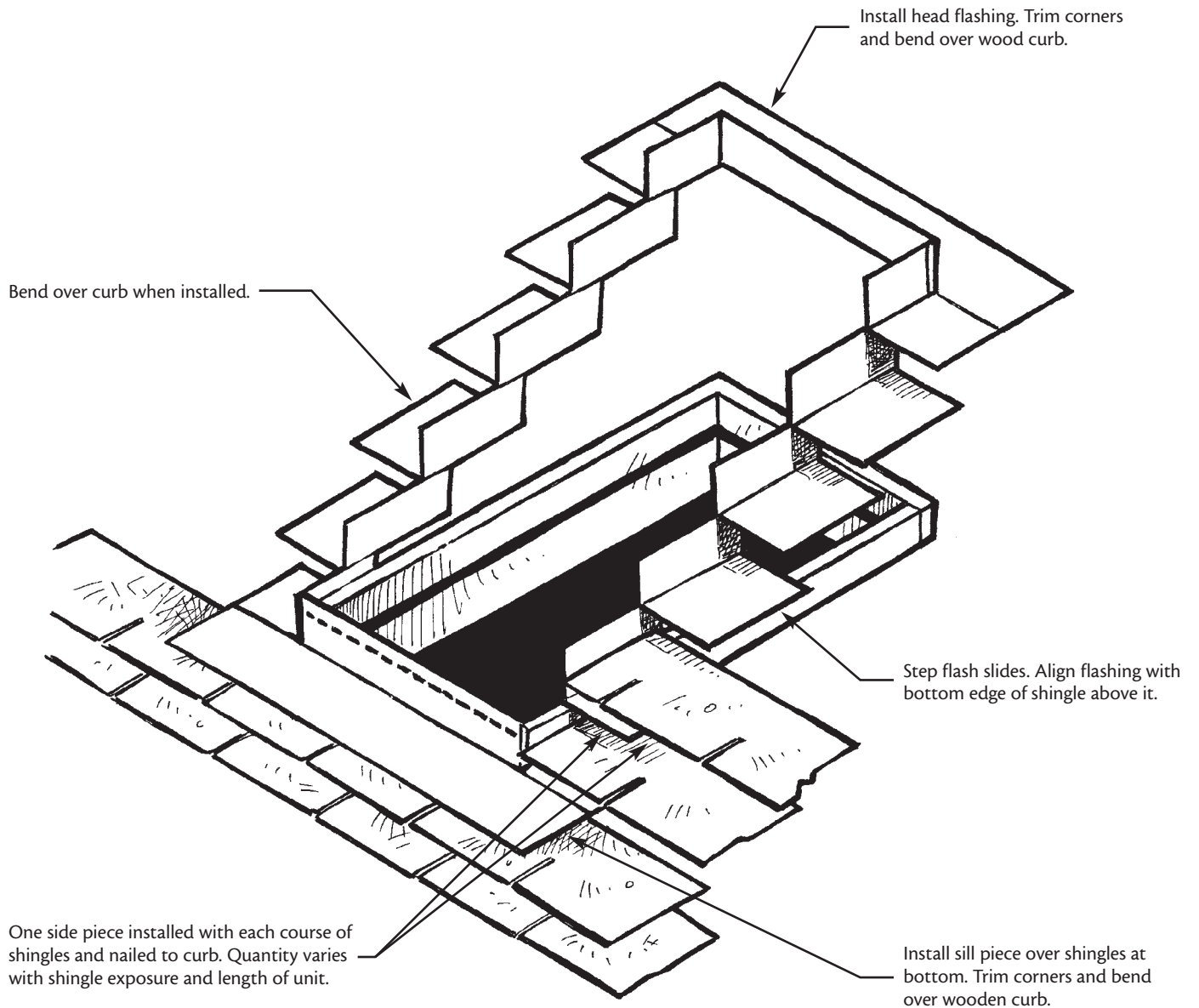
FLASHING MATERIALS	THICKNESS
COPPER	16 OZ
ALUMINUM	0.040"
STAINLESS STEEL	26 GA
GALVANIZED STEEL	24 GA



SIDE FLASHING DETAIL

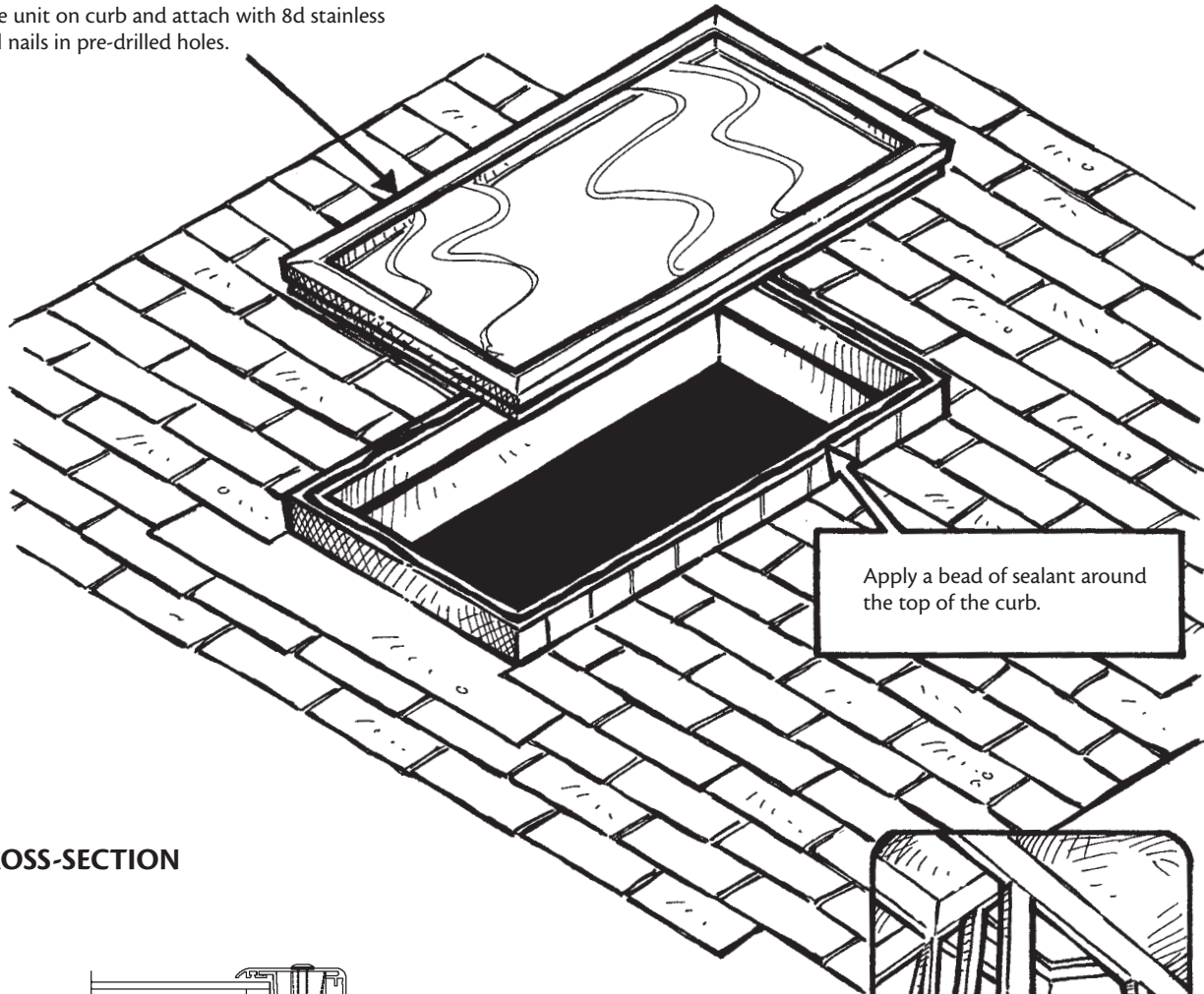


SECTION 3 – FLASHING THE WOOD CURB

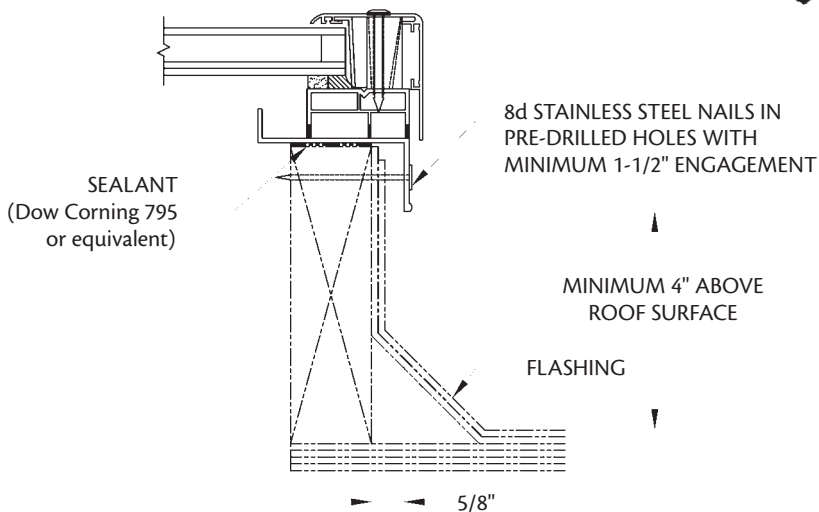


SECTION 4 – INSTALLING THE UNIT

Place unit on curb and attach with 8d stainless steel nails in pre-drilled holes.



CROSS-SECTION



Frame out the skylight well and cover with sheetrock, etc.

Pendiente Mínima del Techo de 3" (76.2 mm) por Cada 12" (305 mm). No Debe usarse en Aplicaciones Verticales.

ASPECTOS DE SEGURIDAD

Aunque los tragaluces Wasco han sido diseñados para soportar el peso de la nieve y el hielo, así como la fuerza de vientos normales, no están diseñados para soportar el peso de personas. Si la seguridad de las personas es motivo de consideración, los tragaluces deberán estar protegidos por barandillas, rejillas o mallas.

LEA LAS INSTRUCCIONES. La instalación correcta es la clave para tener un tragaluz libre de problemas. Los tragaluces deben instalarse con cemento de techado o con un juego de instalación Wasco Superseal. Use masticque para techos de alta calidad, con consistencia apropiada para llana. No use siliconas ni selladores de uretano. Puede comprar Wasco Superseal en lugar de masticque. Cada instalación es diferente y Wasco no puede controlar las condiciones ni la calidad del trabajo realizado. Wasco no asume ninguna responsabilidad por la instalación incorrecta o el incumplimiento de los códigos de construcción vigentes.



GSHR

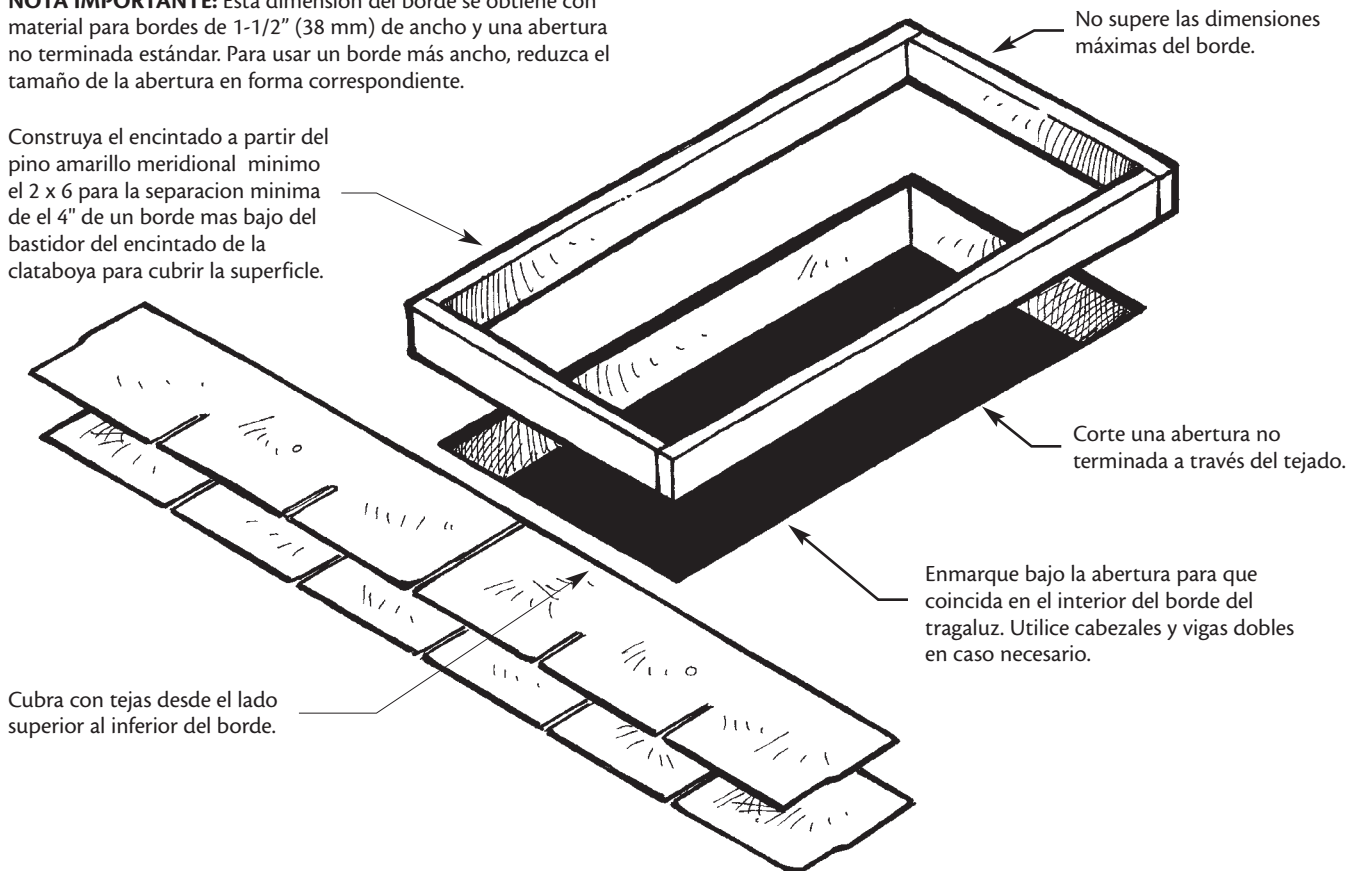
GSHR Unit carries Miami-Dade NOA #04-0728.03 (expiration October 20, 2010) and complies with Florida Building Code including the High Velocity Hurricane Zone.

SECCIÓN 2: DETALLES DE CONSTRUCCIÓN DEL GUARDAGUAS

UNIDAD DE DIMENSIÓN (ANCHURA O LONGITUD)	22	30	46	70
DIMENSIÓN MÁXIMA EXTERNA DEL BORDE	25-1/2"	33-1/2"	49-1/2"	73-1/2"

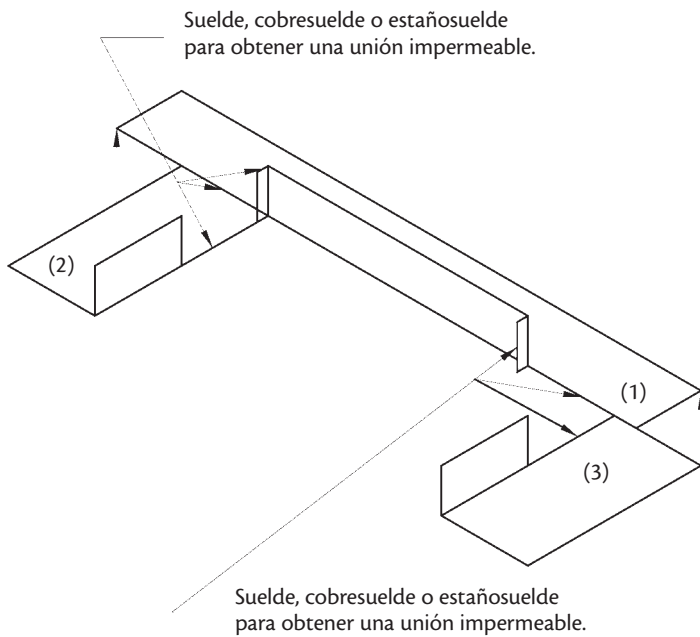
NOTA IMPORTANTE: Esta dimensión del borde se obtiene con material para bordes de 1-1/2" (38 mm) de ancho y una abertura no terminada estándar. Para usar un borde más ancho, reduzca el tamaño de la abertura en forma correspondiente.

Construya el encintado a partir del pino amarillo meridional mínimo el 2 x 6 para la separación mínima de el 4" de un borde mas bajo del bastidor del encintado de la clataboya para cubrir la superficie.



SECCIÓN 2: DETALLES DE CONSTRUCCIÓN DEL GUARDAGUAS

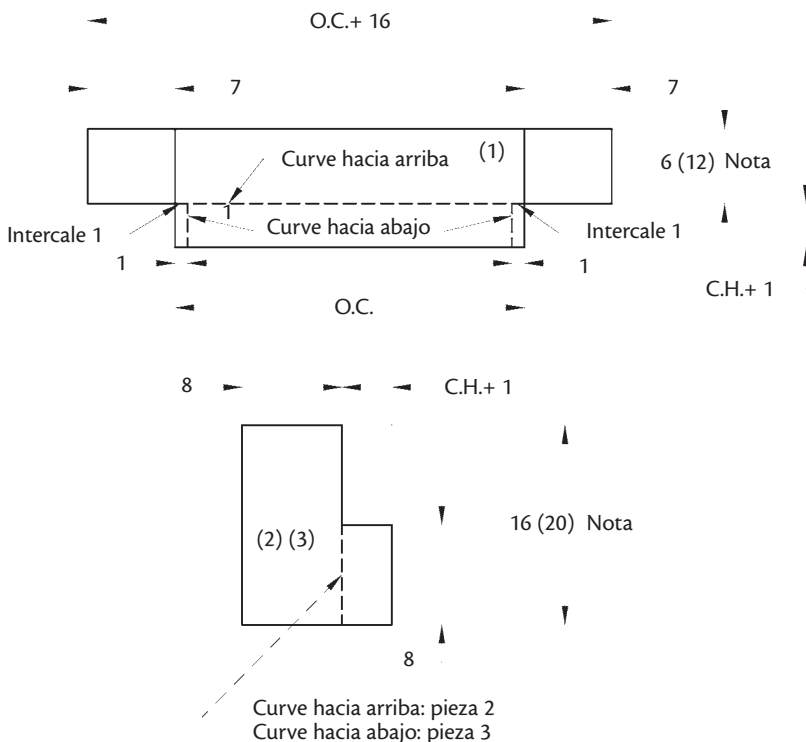
DETALLE DEL CABEZAL Y EL ALFÉIZAR



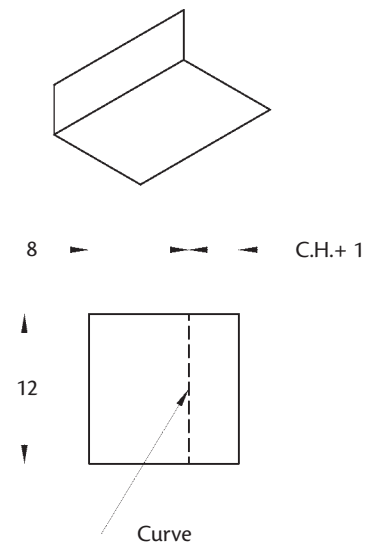
NOTAS IMPORTANTES

1. La anchura de la ceja de cabecera debe aumentar a 12 o más si la pendiente del techo es menor que 5" (127 mm) por cada 12" (305 mm)
2. O.C. = Dimensión exterior de la anchura del borde
3. C.H. = Altura del borde
4. Las dimensiones se presentan en pulgadas
5. Todas las curvaturas son de 90°

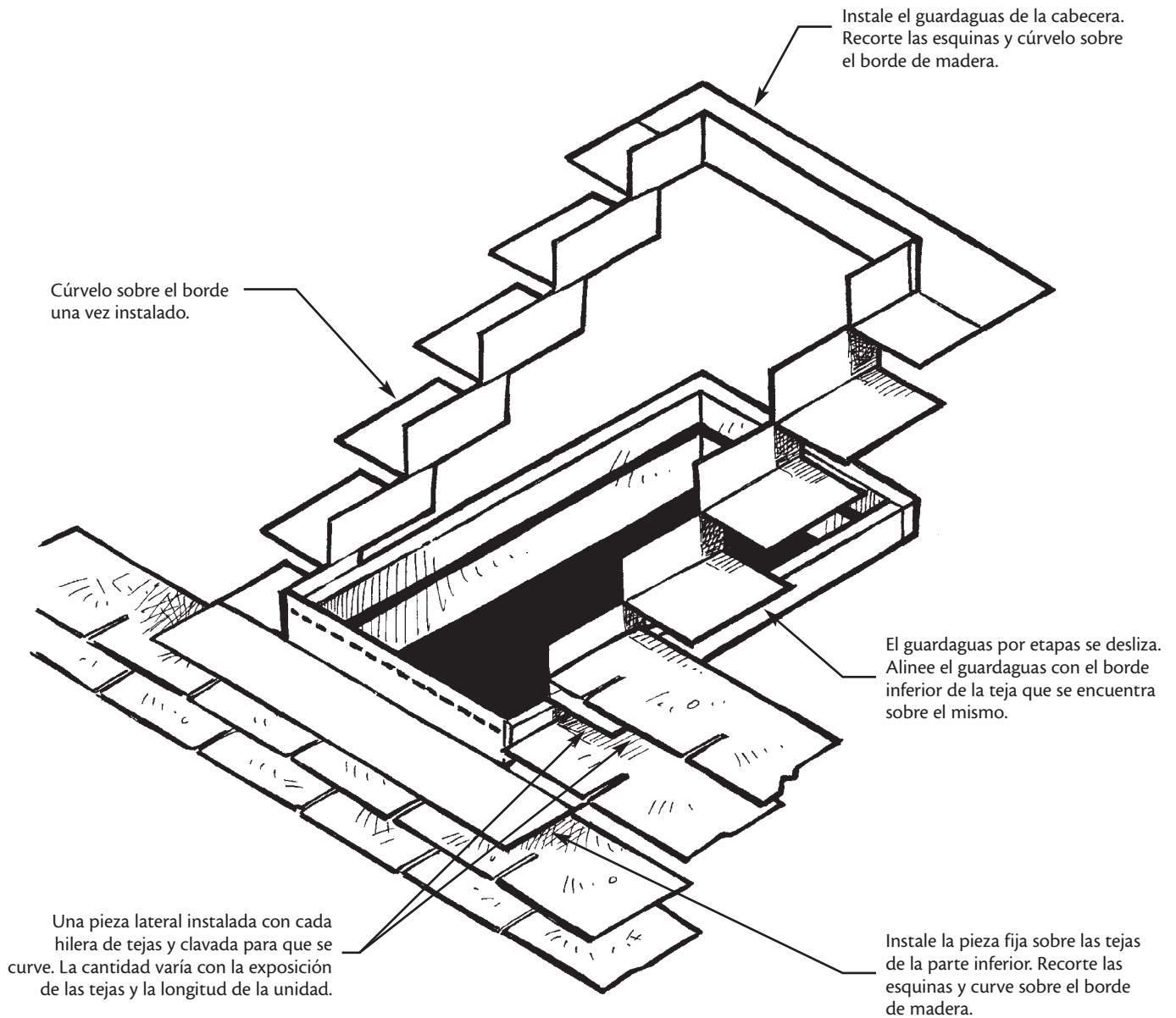
MATERIALES DEL GUARDAGUAS	GROSOR
COBRE	16 OZ
ALUMINIO	0.040"
ACERO INOXIDABLE	26 GA
ACERO GALVANIZADO	24 GA



DETALLE DEL GUARDAGUAS LATERAL

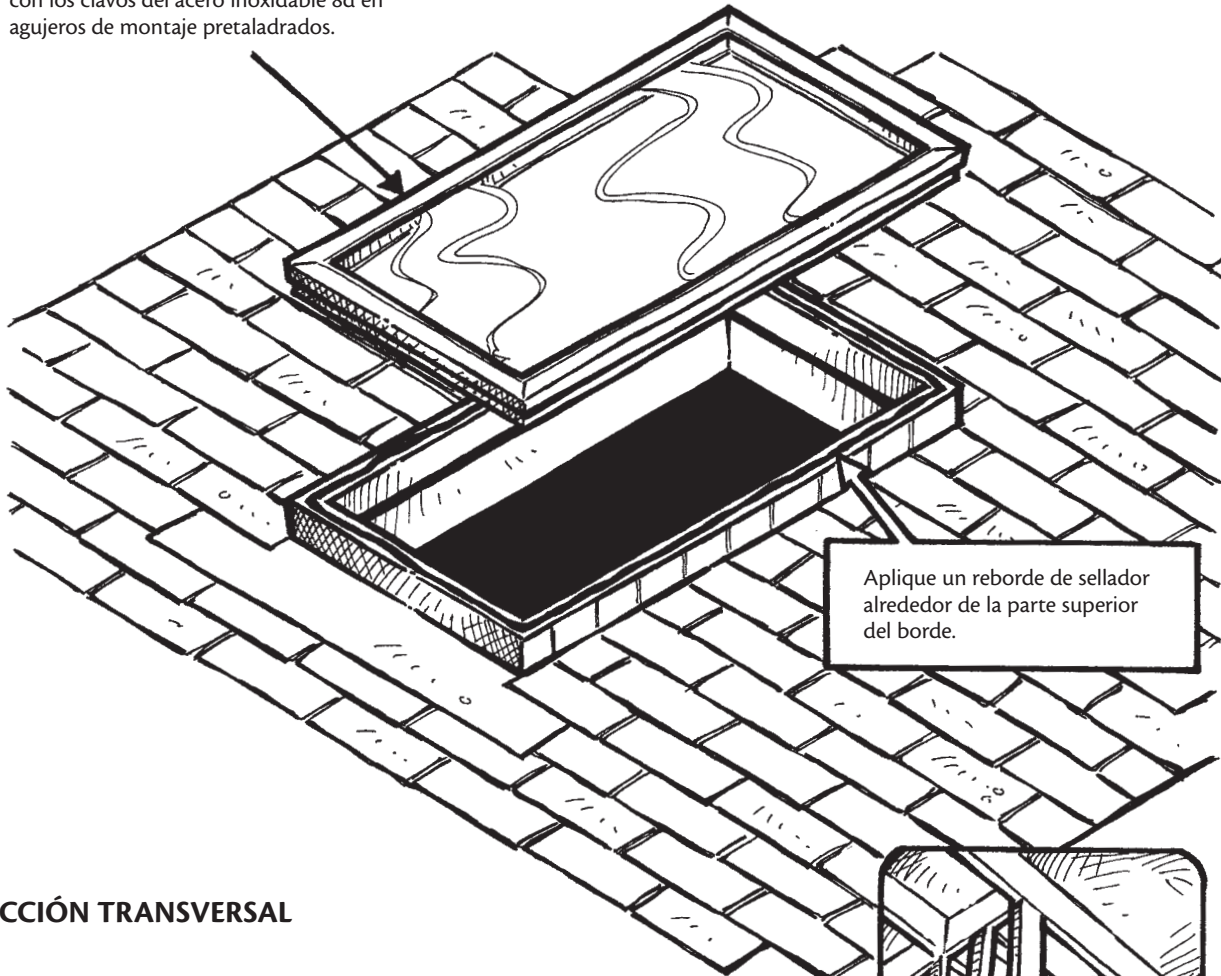


SECCIÓN 3: GUARDAGUAS DEL BORDE DE MADERA

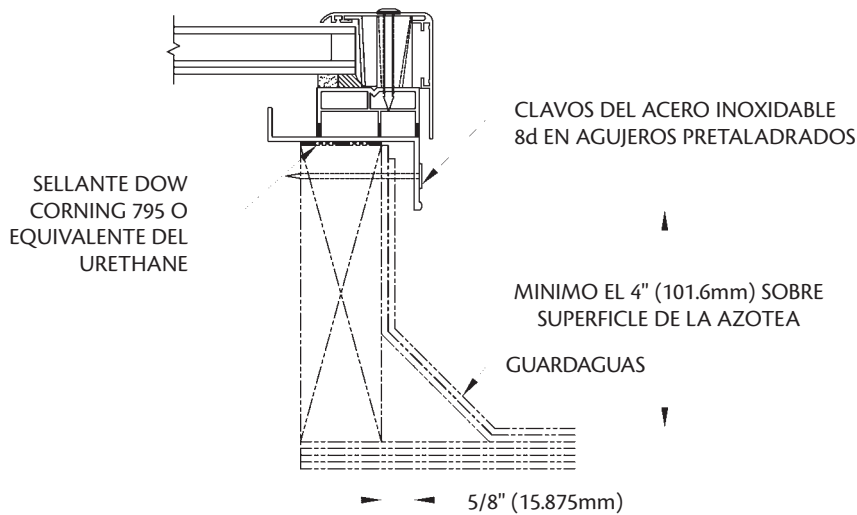


SECCIÓN 4: INSTALACIÓN DE LA UNIDAD

Ponga la unidad en encintado y unala con los clavos del acero inoxidable 8d en agujeros de montaje pretaladrados.



SECCIÓN TRANSVERSAL



Enmarque bien el tragaluz y cúbralo con tablero, etc.





Cleaning and Maintenance of Wasco Skylight Systems

SECTION 1: Maintenance, Storage, Handling

SECTION 2: Cleaning & Repair of Glazing Materials

SECTION 3: Cleaning of Aluminum

Guide to Cleaning and Maintenance of Wasco Skylight Systems

SECTION 1: MAINTENANCE, HANDLING & STORAGE

A. GENERAL

Your new Wasco skylight is engineered to be virtually trouble free. A good routine of maintenance will help maintain the aesthetic quality and functional integrity found in every Wasco unit. Along with occasional cleaning, regularly check all sealant, gasketing, and flashing for possible failure, or erosion and check retainer screws for loosening that may introduce water infiltration. Wasco skylights are designed to function without the use of large quantities of wet sealants and/or caulking material. Some systems do, however, require the use of a sealant in specific areas. As an example: Acrylic glazed units can be sealed with urethane based sealants only – no silicone. polycarbonate glazed units can be sealed with silicone sealants only – no urethane. Should your skylight develop leaks, contact Wasco Field Service personnel at the factory prior to applying any sealants (1-800-388-0293). Factory trained personnel can direct you in isolating the problem area. Use only Wasco gasketing available through your nearest representative. Maintenance checks should include inspecting and if necessary, clearing all weep holes. Tighten any screws or fasteners (with hard tools only) that are intended to hold glazing frames in place and clear any collected debris that may have accumulated across the exterior of the top or head of skylights. If your unit includes exterior gutter systems, they should be kept free of all debris. It is a good idea to periodically check all glazing for scratches or abrasions. If at any time a fracture is discovered in a glazing line, replace it immediately.

B. STORAGE

GLASS:

Glass, like all glazing, should remain in its packing crate until ready to install. Cover the crates with good quality plastic or tarpaulin to protect them. Raise the crate to allow free air movement. Store glass in a vertical position.

Avoid exposing glass to extreme temperatures and harsh industrial solvents.

ACRYLIC:

Due to the nature of the material to "expand" and "contract", special care should be used to avoid extreme temperatures. **Avoid exposing acrylic to extreme heat. Acrylic will begin to soften at 260 degrees to 275 degrees. Avoid stacking domes in direct sunlight as this will produce a magnification effect where the top domes act as "focusing dishes" to concentrate heat to the lower domes resulting in deformation. Use material as soon as possible. Do not expose masked acrylic to high temperatures, or it will become very difficult to remove the masking. Do not place plastic glazing or plastic glazed skylight units directly on roof surfaces or other similar surfaces unless elevated to allow air flow under units. FAILURE TO DO SO WILL RESULT IN DISTORTION OF GLAZING.**

REMOVAL OF MASKING FROM ACRYLIC. You can remove the paper masking with a cardboard tube by rolling the masking around it. All masked sheets should be kept away from heat and sunlight, and masking should be removed soon after receipt. If the adhesive has hardened, moistening it with aliphatic naphtha, hexane or kerosene will help soften it. Do not use gasoline or sharp-edged objects such as razor blades, etc.

ALUMINUM:

All aluminum should be placed on edge and separated to allow free air movement. Ideally, all aluminum should be installed within a few days. If longer storage periods are foreseen, a protective plastic or tarpaulin should be used. The protective cover should not touch the aluminum, and provide a sufficient air space above the surface of the aluminum to encourage free air movement. The tarpaulin must be free of fungicides containing heavy metals or chlorides. Aluminum that comes packaged in ordinary paper or cardboard should be stored in a stable temperature zone, or should be unpacked. Remove all wet paper or cardboard and rewrap if longer storage times are required.

Guide to Cleaning and Maintenance of Wasco Skylight Systems

C. HANDLING

Glass lites are extremely heavy. The use of glazier's suction cups is highly recommended. Acrylic domes are comparatively much lighter, however, they are very fragile if racked or twisted. A minimum of two men should be utilized to carry any domes larger than about 3'0" square.

SECTION 2: CLEANING & REPAIR OF GLAZING MATERIALS

A. CLEANING

GLASS:

Limit cleaning solutions to soap, or ammonia, and warm water. Use care when washing with industrial solvents containing elements such as carbon tetrachloride since they would mar or dull the surface. Glass that has an applied solar control film may be washed with any common window washing solution 30 days after installation. Avoid abrasive agents and bristle brushes. Sponges, soft cloths, and chamois are recommended. (Soil may be removed from glass by any conventional method.)

ACRYLIC:

Use a thoroughly diluted mild soap or detergent and water. Apply with a soft cloth applying only light pressure. Rinse with clean water and dry by blotting with a damp cloth or chamois. **CAUTION:** Abrasives will scratch the surface of acrylic! Never use instruments such as a putty knife or razor blade to remove spots from glazing. Never use solvents such as ammonia or ammonia based cleaners, glass window cleaning fluid, gasoline, acetone, carbon tetrachloride, lacquer thinner, or alcohol since they attack the acrylic surface. Do not clean acrylic in direct sunlight. Aliphatic naphtha (no aromatic content) or kerosene may be used to remove grease, oil and roofing cements from acrylic products. Paint can often be removed from acrylic by applying a paste consisting of wallpaper paste and a 10-20% solution of caustic soda or trisodium phosphate and water, followed by a thorough rinsing with warm water. **CAUTION:** Caustic soda and trisodium phosphate attack the skin very quickly. Extreme care should be exercised when working with these materials.

B. MINOR REPAIRS

SCRATCH REMOVAL:

Fine scratches can be removed by hand polishing. Apply a plastic scratch remover or a compound such as Simonize cleaner to a soft flannel pad and rub. When the scratches have disappeared, remove all residue and polish. For deeper scratches, first sand lightly, with a 400-grit "wet or dry" sandpaper, using plenty of water and rinsing the sandpaper frequently. Follow by buffing with a clean muslin wheel and a good polishing compound. For the highest gloss, use a clean-up wheel made of soft cotton or flannel sections, and on which no compound is used. An electric drill with a buffing wheel also is ideal.

NEUTRALIZING STATIC ELECTRICITY:

A static electrical charge can develop on acrylic sheet during handling and processing. This is common to many materials, particularly plastics. Several anti-static cleaners for plastics are available which will reduce static electricity and dust attraction. Wiping with a soft damp cloth or chamois is all that is necessary to keep acrylic dust-free between applications of these cleaners.

Guide to Cleaning and Maintenance of Wasco Skylight Systems

SECTION 3: CLEANING OF ALUMINUM

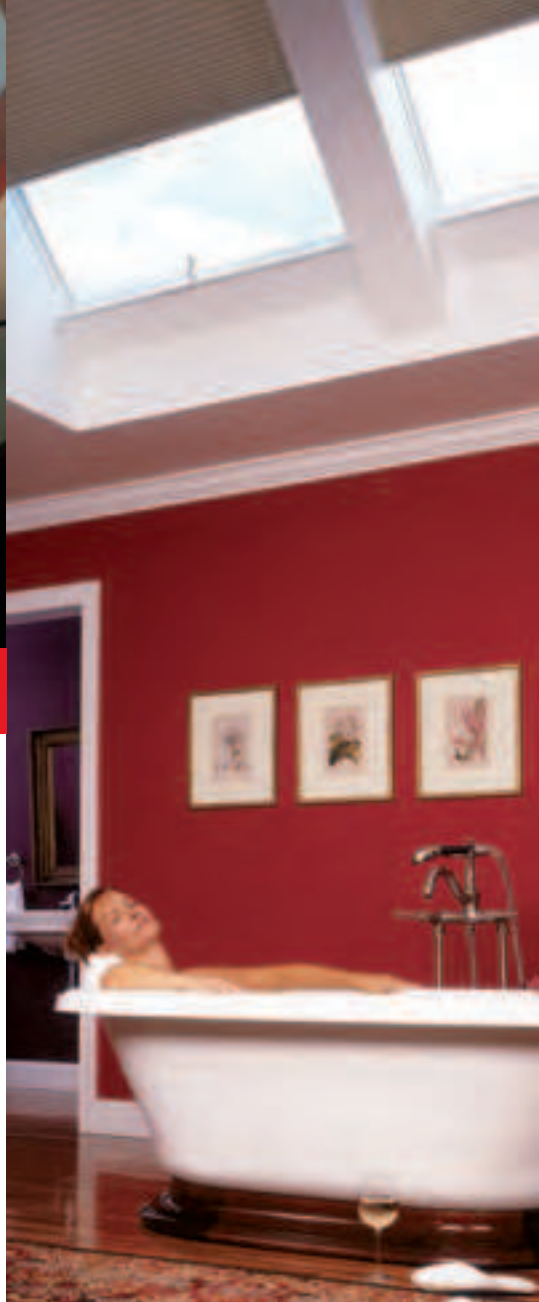
Mild hand soap and warm water may be safely applied to any of the aluminum finishes. Avoid indiscriminate use of steel wool, strong acids, and abrasive cleaners. When used properly, industrial cleaners may be used safely and are highly effective. Test the cleaning solution to be used on an unobtrusive section of the finish. Use the same concentration and technique that will be used for the entire job. Let the cleaner remain in place for the same time. Allow it to dry and inspect for stains. Test lacquered and painted finishes for softening and possible dissolution. Avoid exposing glazing materials to solvents, brushes, steam, and abrasives when using any aluminum cleaning procedures. Avoid using cleaners in extreme heat or cold. For best results, outdoor cleaning should be done on mild cloudy days or in the shade. Water-based cleaners should be thoroughly rinsed with water, after which this part of the area should be allowed to dry or be wiped dry. Cleaners containing wax, oil or silicones are removed with a dry cloth. Be sure to remove all traces of cleaner from cracks and corners.

MILD SOAPS AND NON-ETCHING CLEANERS that can be applied with bare hands may be used for cleaning aluminum finishes. Detergents too strong for the hands, such as some automatic dishwasher detergents, should be spot tested first. Some of these can bleach paint and discolor non-finished and anodized aluminum. Non-etching cleaners remove soil without attacking the metal or its finish. Some mixtures may irritate the skin on contact. Rubber gloves or a long handled fiber brush should be used. After cleaning, the aluminum should be thoroughly washed with clear water and dried.

SOLVENT CLEANERS are more effective on stains and soils than cleaners in the first group. Solvent and emulsion cleaners may be used without difficulty on bare, anodized, conversion coated and porcelainized aluminum. When used on painted (and lacquered) finishes, solvent and emulsion cleaners can remove many of the paints and clear organic coatings (lacquers) used with aluminum. Both mild cleaners and the solvent-emulsion cleaners will remove dirt and some stains. They will not, however, restore the appearance of aluminum that has weathered nor remove heavy grime encrustation. For these conditions a more aggressive cleaner is required.

ABRASIVE CLEANERS will restore weathered aluminum and remove most stains and grime. These cleaners are manufactured and sold under various generic descriptions including polish, cleaner, cleaner-polish, wax-cleaner, wax polish, metal brightener, scouring powder and the like. Their effectiveness on various soiled and darkened aluminum depends on their formulation and vigor of application. Abrasive cleaners contain abrasives to which water, oil, wax, silicones, soap and an acid or alkalis may be added, either in singles or in combination. The abrasives remove the dirt and surface oxidation; the soaps, acids and/or alkalis clean. Traces of wax, oil, or silicones remain behind after the compound has been applied and removed. They provide luster and a moderate amount of protection. Abrasive cleaners containing fine grit or polishing agents may be used with care on all aluminum finishes. Care is necessary because even the finest polishing agent is an abrasive and prolonged rubbing may dull a bright specular finish in time. For the ultimate in specular finishes, the metal must be buffed. Household cleaners often contain coarse abrasives. They should never be used on any surface other than porcelain without caution. Cleaners containing moderately coarse grit may be used freely on porcelain finishes only. All other finishes require considerable caution. Moderate abrasives can dull a bright finish in a relatively short time. Cleaners in this group are often used to remove heavy soils and oxides prior to final cleaning and polishing with a fine grit cleaner. When this is done the abrasive cleaner must be thoroughly removed before the fine polish is applied, otherwise, a few grit particles that remain on the surface will produce noticeable scratches.

Special note: these procedures are suggestions only . Since actual procedure and use is beyond our control, these suggestions should not be interpreted as having any guarantee of results. Wasco products, inc. Reserves the right to alter any of this information without prior notice, and will take no responsibility for unsatisfactory results from improper use of applicable products.



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