

City of Foster City

ESTERO MUNICIPAL IMPROVEMENT DISTRICT

610 FOSTER CITY BOULEVARD
FOSTER CITY, CA 94404-2222
(650) 286-3200
FAX (650) 574-3483

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FEB 13 2004

**PLANNING
DIVISION**

CITY OF FOSTER CITY
COMMUNITY DEVELOPMENT DIRECTOR'S ACTION
NOTICE OF DECISION

ACTION DATE: October 2, 2000

CASE NO: UP-76-012M

APPLICANT: Sea Colony Homeowners' Association

APPLICANT ADDRESS: Franciscan Property Management 570 Price Ave, Suite 200 Redwood City, CA 94063

APPLICATION FOR: Prototypical Design for Skylights (revised)

LOCATION: Sea Colony Planned Development

ZONING: R-1/PD Single Family Residential/Planned Development

ACTION TAKEN: Approved with Conditions

On the date listed above, the Community Development Director of the City of Foster City, took the action described above on the subject Architectural Review application based on the following findings:

1. That the proposal is consistent with the Foster City General Plan and Title 17, Zoning, and Chapter 2.28, Planning, of the Foster City Municipal Code because the skylight(s) will enhance the interior of the house by providing more natural light and will be consistent with the residential use of the subject property.
2. That the design of the proposal is appropriate to the City, the neighborhood and the lot in which it is proposed because the location, size, design, colors, materials and finish of the skylight(s) will reasonably blend with the roof of the existing house and will be in keeping with similar improvements in the neighborhood.
3. That the design of the proposal is compatible with its environment with respect to use, forms, materials, colors, setbacks, location, height, design, or similar qualities as specified in Section 17.58.010, Intent and Purpose, of Chapter 17.58, Architectural Control and Supervision, of the Foster City Municipal Code because the skylight(s) will be flat or slightly curved with clear or smoke-colored glazing, will be compatible with the existing roof, and will meet the criteria for location, size, design, colors, materials and finish in the adopted design guidelines for skylights.

4. That the proposal will not, under the circumstances of the particular case, be detrimental to the health, safety, morals, comfort and general welfare of the persons residing or working in the neighborhood of such proposed use, and will not be injurious or detrimental to property and improvements in the neighborhood or the general welfare of the City because the skylight(s) will be compatible with the design of the house and other houses in the neighborhood, will meet the requirements of Section 17.58.010, Intent and Purpose, of Chapter 17.58, Architectural Control and Supervision, of the Foster City Municipal Code and will not have detrimental visual impacts on the neighborhood.

This action is subject to any conditions contained in Exhibit A, attached.

Expiration

Any Architectural Review approval shall, without further action, become null and void if not used within two (2) years from the date of approval thereof, or within any shorter or longer period of time if so approved by the Community Development Director.

Appeal

Pursuant to Section 17.06.150 of the Foster City Municipal Code, an action of the Community Development Director on an application may be appealed within ten (10) calendar days after the date of the Community Development Director's decision, in writing, to the Planning Commission. Appeals may be filed using the appeal form available in the Community Development Department or by letter. There is a fee for filing an appeal. All appeals must be filed in accordance with Section 17.06.150.

Acknowledgment by Applicant

Pursuant to Section 17.58.040.E of the Foster City Municipal Code, any Architectural Review decision shall not be effective until the permittee acknowledges acceptance of any conditions of approval and any appeal period has lapsed, or if there is an appeal, until a final decision has been made on the appeal.

In order to demonstrate that you are aware of and understand the Architectural Review conditions of approval (attached hereto as Exhibit A), please sign the original of this letter and return it to the Planning/Code Enforcement Division. Please keep the duplicate for your records. *Please be advised that a Building Permit will not be issued until the Planning/Code Enforcement Division has received the signed Notice of Decision.*

Sincerely,



Richard B. Marks
Community Development Director

PAUL STRONG
(Applicant's Name) (Please Print)

Paul Strong 01/07/04
(Applicant's Signature)

Planners Initials: ECF

EXHIBIT A

SEA COLONY HOMEOWNERS' ASSOCIATION

Prototypical Design Guidelines for Skylights

The following guidelines shall govern the installation and replacement of all skylights in the Sea Colony Planned Development, and shall supercede the previous Prototypical Design Guidelines for skylights approved on October 3, 1995.

CONDITIONS OF APPROVAL

- 1. All construction shall be designed, constructed, installed, and maintained in a professional manner and appearance.
2. All materials and colors shall be as approved. Once constructed or installed, all improvements shall be maintained in accordance with the approved plans. Any changes which will affect the exterior character of the work shall be resubmitted for approval.
3. The skylight frame and all vents, gutters, downspouts, flashings, electrical conduits, etc. shall be painted to match the color of adjacent surfaces.
4. Standard residential security requirements as established by Chapter 15.28 of the Foster City Municipal Code shall be provided.
5. Prior to any final building inspection approval, imposed conditions and all improvements shall be completed to the satisfaction of the City.
6. All architectural elements such as soffits, screens, etc. not shown or detailed on the plans shall be finished in a material and color in harmony with the exterior of the building.
7. The glazing shall be clear or bronze tinted and shall not extend more than 10" above the roofline.
8. Skylight frames shall be dark bronze aluminum.
9. The following skylights may be installed:

- Velux Model TPS Sizes # 104, 106, 304, 308, 606
Velux Model VS Sizes # 101, 104, 106, 108, 304, 308, 601, 606
Velux GPL Sizes # 308 and 606
Velux GHL Sizes # 104, 304

Flat, fixed skylights approved JAJ 6/5/02

Royalite - fixed Glass = equivalent approved for use DEC 7/30/02

- 1. The Homeowner or applicant shall submit the following:
- A letter from the Sea Colony Homeowners Association (HOA), indicating their action on the proposal.
- An Architectural Review application and filing fee.
- Three copies of a site plan indicating location and dimensions of skylights.

2. The Planning/Code Enforcement Division staff will review the Architectural Review application to confirm that the proposal is consistent with the prototypical design approved for replacement of skylights
3. The homeowner or contractor shall apply for a Building Permit from the Building Inspection Division and shall submit four copies of any required drawings and fees.

Paul Strong String Mgt
~~Paul Strong, Managing Agent~~
~~Emerson Property Management, for~~
Sea Colony Homeowners' Association

02/04/04
Date

Richard B. Marks
Richard B. Marks, Community Development Director
City of Foster City

2/17/04
Date

FOSTER CITY

Homeowners' Association



June 5, 2002

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JUN 06 2002

PLANNING
DIVISION

Jeff Juarez
Planner
City of Foster City
610 Foster City Blvd.
Foster City, California 94404

RE: Sea Colony HOA

Dear Jeff:

This letter is to confirm the Sea Colony HOA would like to add flat fixed skylights consistent with previously approved prototype sizes (not to exceed 10" from roof line to top of skylight) to their skylight prototypes.

Jeff, if you have any questions please do not hesitate to call me.

Sincerely,

Paul Strong
Strong Management

UP-76-012M
CITY OF FOSTER CITY
PLANNING DEPARTMENT

JUN 06 2002

ADMINISTRATIVE APPROVAL
WITH CONDITIONS

cc: Board of Directors'

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**PLANNING
DIVISION**

TOP HINGED ROOF WINDOWS



The Models GHL™ and GPL™ Roof Windows let you expand or transform upstairs space into beautiful living areas filled with daylight, outdoor views, and fresh air.

Designed to be installed within reach, such as in attics, above-garage bonus rooms, and loft areas, the Models GPL and GHL open to provide maximum ventilation.

When the roof window is closed, a ventilation flap can be opened to allow in a breath of fresh air in any weather. Additionally, the Model GPL comes

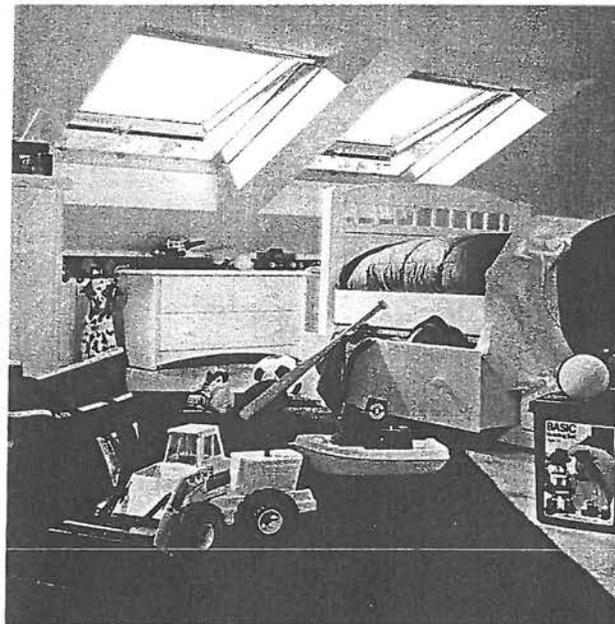
in two larger sizes and opens to a 45° angle to satisfy Egress requirements for emergency escape.

For easy glass cleaning from inside the room, the sash rotates completely inward. A select wood frame and sash coated with a clear finish, protective aluminum or copper cladding, and Comfort Glass ensure durability and energy efficiency. An optional insect screen and sunscreening are also available.

GHL/GPL SIZE DIAGRAM (outside frame dimensions)

Size for Trusses	Sizes for Rafters	
38 1/4"	GHL 104	GHL 304
46 1/4"		GHL 606 *
55"	GHL 308 *	
	21 1/4"	30 1/4" 44 1/4"

* 308, 606 correspond with Model GPL and meet Egress requirements



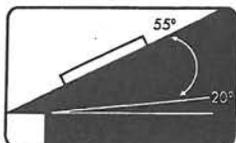
The sash on Models GHL and GPL pivots inward for easy and safe cleaning of the outside glass pane from inside the room.

UP-76-012M
CITY OF FOSTER CITY
PLANNING DEPARTMENT

OCT 03 2000

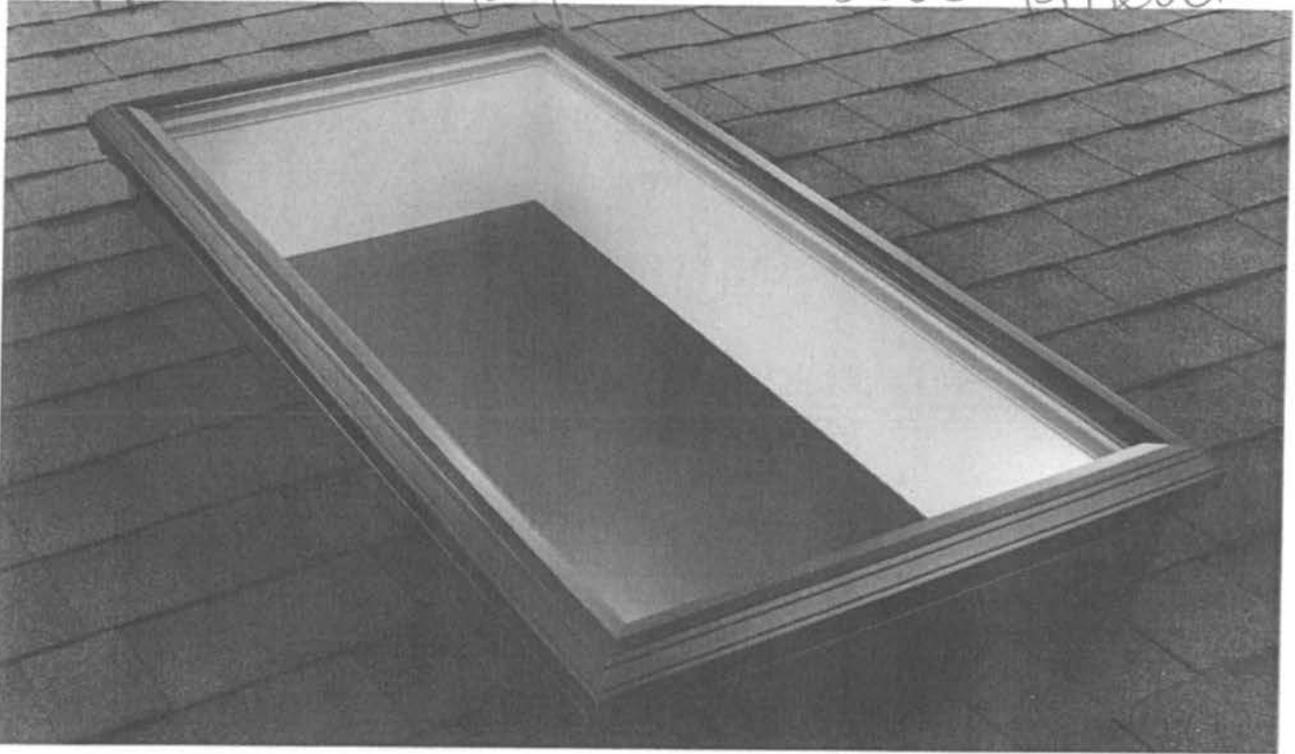
Hamilton
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WITH CONDITIONS ECF

INSTALLATION PITCH

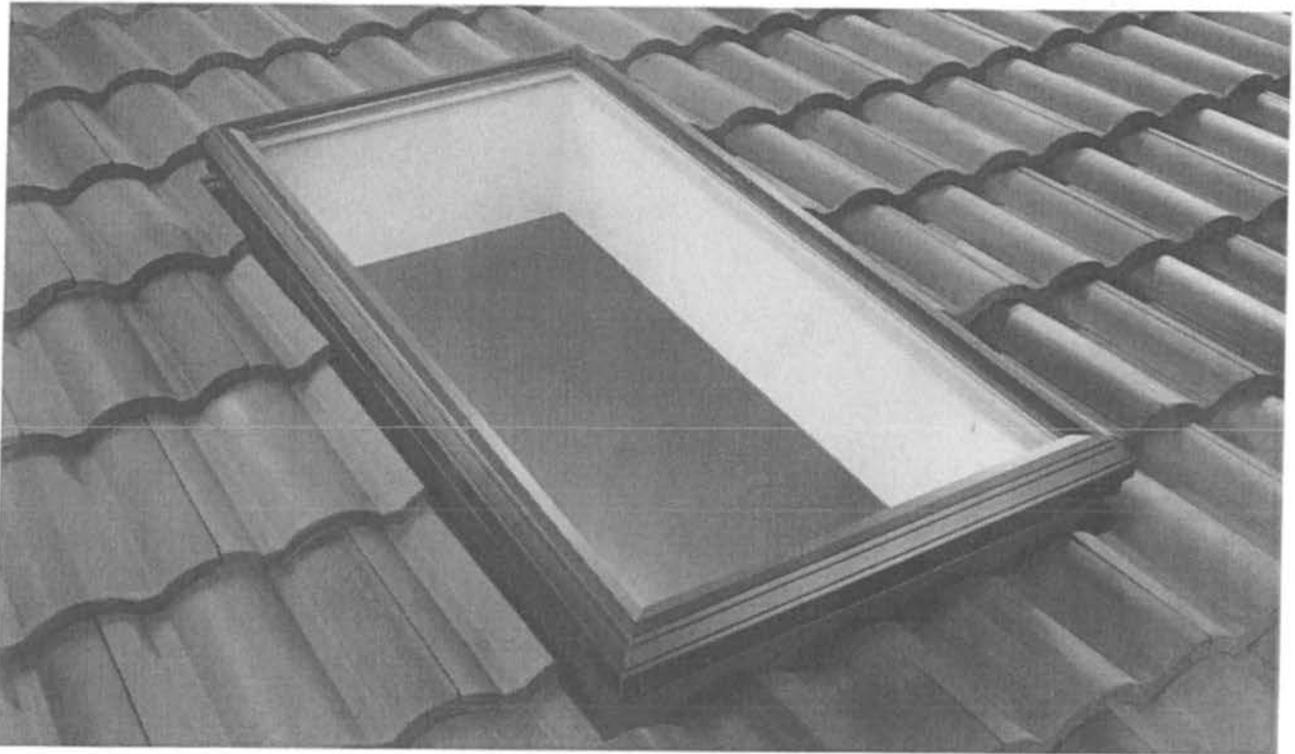


Approved SKYlight for Development

EXAMPLE OF INSTALLATION: 1 SKYLIGHT FOR 2246



EXAMPLE OF INSTALLATION: 1 SKYLIGHT FOR 2144



Corporate Overview

Headquartered in the San Francisco Bay Area, Royalite Manufacturing offers a comprehensive line of skylights, ladders and quality building products for residential, commercial and industrial applications.

Reflecting the highest standards of quality, Royalite products are rapidly becoming the industry benchmark for safety, reliability and durability. Through innovative engineering and design, Royalite's product lines address and comply with today's safety and energy conservation concerns. All products meet or exceed all national and California building codes and standards.



Utilizing recently developed energy efficient skylight glazing materials, Royalite provides a wide variety of architectural shapes, colors and styles.

printed in the USA

As a modern, aggressive company, Royalite proudly offers extended product guarantees, CAD drawings and custom job engineering and fabrication. We maintain an extensive materials inventory and are capable of providing extremely quick turn-around on most product requirements.

for shop drawings
and specifications
please visit our web site
www.royalite-mfg.com
or call
800-875-9548



1055 Terminal Way
San Carlos, California, 94070
Telephone 650-637-1440
800-875-9548
Fax 650-637-9770
www.royalite-mfg.com



Royalite
MANUFACTURING, INC.

Singlelite Skylights



design: outside the lines

Singelite Skylights

ICBO listing ER 5377

Maintenance-free all aluminum construction

Polyurethane UV treated finish

All standard sizes & configurations are double paned

All standard units are either fixed or operable

Highest quality acrylic and glass

Heliarc welds

Sun shades

Made in the USA

**Custom Shapes:
Pyramids, Double Hips, Ridge Units,
Solariums and other Irregular Shapes**



Operable Dome



Fixed Glass



Fixed Double Hip



Glass Octagon



Acrylic Octagon



Fixed Pyramid

current models

PRODUCTS

VELUX Skylights, designed for both within-reach and out-of-reach applications, can transform any room into the best room in the house. Available in a variety of sizes that will easily integrate into your ceiling and roof construction.

SKYLIGHTS



VSE NEW!
ELECTRIC VENTING
SKYLIGHT



VS
MANUAL VENTING
SKYLIGHT



FSF
FIXED SKYLIGHT WITH
VENTILATION FLAP



FS
FIXED SKYLIGHT



FCM
CURB MOUNTED
FIXED SKYLIGHT



MORE INFO

■ WHY CHOOSE VELUX

■ INSTALLATION
PROCESS

■ WHERE TO BUY

■ WARRANTY
INFORMATION

■ PRINT/ORDER A
BROCHURE

■ ENERGY EFFICIENCY

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**PLANNING
DIVISION**

TOP HINGED ROOF WINDOWS



The Models GHL™ and GPL™ Roof Windows let you expand or transform upstairs space into beautiful living areas filled with daylight, outdoor views, and fresh air.

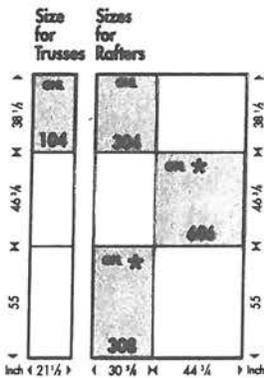
Designed to be installed within reach such as in attics, above-garage bonus rooms, and loft areas, the Models GPL and GHL open to provide maximum ventilation.

When the roof window is closed, a ventilation flap can be opened to allow in a breath of fresh air in any weather. Additionally, the Model GPL comes

in two larger sizes and opens to a 45° angle to satisfy Egress requirements for emergency escape.

For easy glass cleaning from inside the room, the sash rotates completely inward. A select wood frame and sash coated with a clear finish, protective aluminum or copper cladding, and Comfort Glass ensure durability and energy efficiency. An optional insect screen and sunscreening are also available.

GHL/GPL SIZE DIAGRAM
(outside frame dimensions)

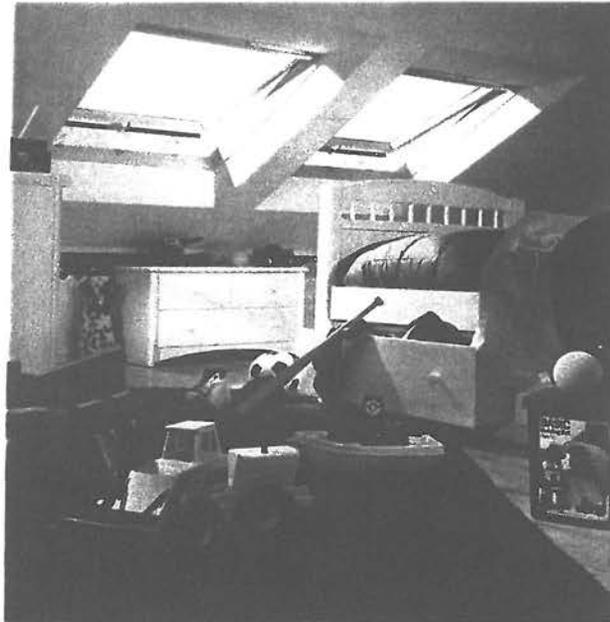
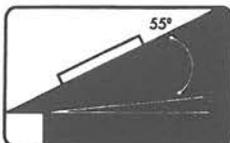


* 308, 606 correspond with Model GPL and meet Egress requirements

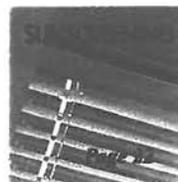
UP-76-012M
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PLANNING DEPARTMENT

OCT 02 2000
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ADMINISTRATIVE APPROVAL
WITH CONDITIONS ECF

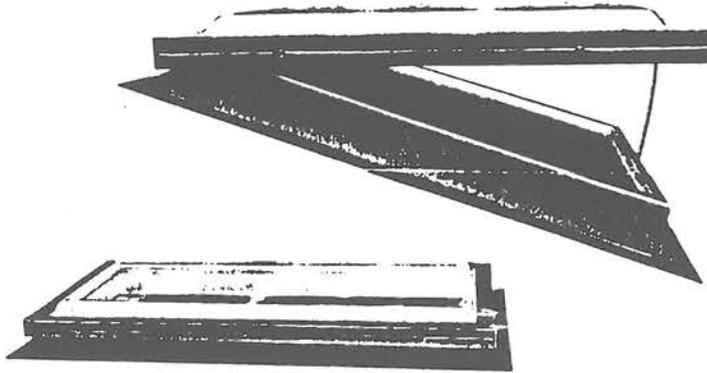
INSTALLATION PITCH



The sash on Models GHL and GPL pivots inward for easy and safe cleaning of the outside glass pane from inside the room.



PROTOTYPICAL SKYLIGHT



- All welded aluminum construction protects against elements
- Light weight — permits single person handling and installation
- Sizes through 46 1/4" x 46 1/4" (*46 1/4" x 46 1/4" size is not generally available in tempered glass)
- Frame finishes in choice of natural or earthtone aluminum. Natural with clear acrylic. Earthtone with clear or bronze acrylic.

FRAME: ALUMINUM EXTRUSION BAKED ENAMEL FINISH COLOR TO MATCH TRIM OF HOUSES. *Dark Bronze Aluminum*

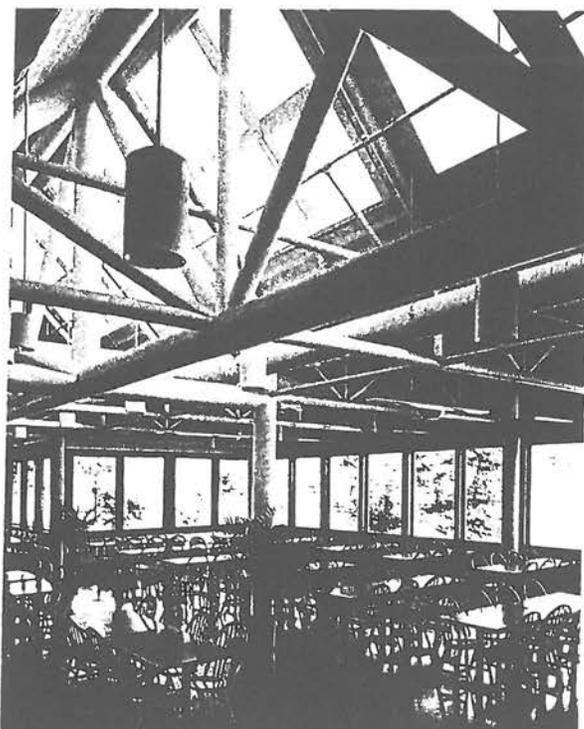
GLAZING: TEMPERED GLASS, ACRYLIC OR TEMPERED GLASS.

NOTE: MUST BE FLUSH-MOUNTED.

07810/VEL
BuyLine 2216

The Complete Guide To Roof Windows And Skylights

VELUX®



Roof Windows

Ventilating Skylights

Fixed Skylights

Accessories & Control Systems

Installation, Flashings & Glazing

Specifications

Introducing New VELUX® Products for 1993

Before you take a look at this year's catalog, we would like to point out a few additions we're making. This year VELUX® proudly unveils two innovations in the world of roof windows and skylights. First is our full-function Electric Venetian Blind System (page 10) that allows you to shade or light a room with minimal effort, no matter where the blinds are located. The full-function advantage is simple: it lets you raise, lower or tilt blinds, all with the push of a button.

Next is the exclusive VELUX Type ECX Flat Roof Curb (page 11). With this product the beauty of VELUX Roof Windows and Skylights can be part of any flat roof. The ECX Flat Roof Curb helps create a pitch suitable

for installation for almost all VELUX Roof Windows and Skylights (Model GGL™ not included). VELUX also introduces two new skylight sizes this year: the Model FSF™ and Model FS™ size 112, and Model VS™ size 101.

New products and lasting quality are hallmarks of VELUX – the culmination of more than 50 years' experience making the world's finest roof windows and skylights. We hope this catalog provides you with both knowledge and insight into the unlimited possibilities of VELUX Roof Windows and Skylights. In it you'll find descriptions of our windows, as well as suggestions for selecting and accessorizing them. VELUX stands behind all roof

windows and skylights with a promise of lasting service. Should you ever have a question or comment about your VELUX product, give us a call at 1-800-88-VELUX. We're happy to help you.

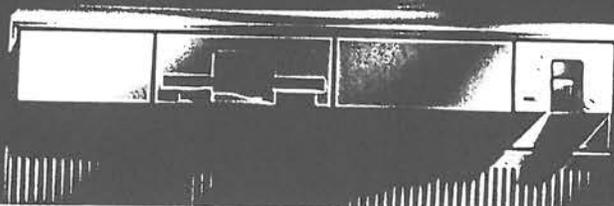
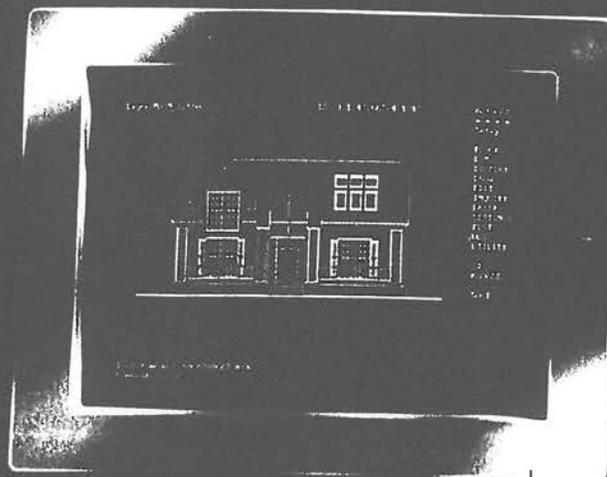
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- Roof Windows.....
- Ventilating Skylights.....
- Fixed Skylights.....
- Accessories & Control Systems.....
- Installation, Flashings & Glazing.....
- Specifications.....

App/Product
VELCAD is the
for designing an
windows and skyl
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easy-to-use point
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VELCAD

VELUX®



App/Product Presentation

VELCAD is the only software you'll want for designing and specifying the best roof windows and skylights in the world. Comprehensive designed in Microsoft® Windows™ 3.0, VELCAD not only employs an extremely easy-to-use point and click interface, but also includes enough features to satisfy architects and designers alike. VELCAD is operable with or without AutoCAD®, includes two levels of user experience and has the flexibility to generate .DXF files.

By operating independently of AutoCAD, VELCAD allows a wider variety of users to view and print detail drawings and specifications without having to invest in a CAD software package. VELCAD also has the ability to interface with AutoCAD, enabling users to seamlessly manipulate elevations, drawings and schedules within the AutoCAD environment.

VELCAD Library

Within VELCAD, users are asked a variety of design questions which determine the selection, specification and detailing of all VELUX products. Once the appropriate selection has been made, the system automatically edits the specification, assembles the detail and generates a roof window or skylight schedule. Within AutoCAD, you may also rotate the elevation to the correct slope of roof. The benefit of working in this mode is to ensure the correct product is chosen and to educate the user as to what factors go into the decision process.

Within the VELCAD Library, users are not asked a series of questions, but are merely prompted for a product specification or sunroom plan selection. In this mode the user enjoys the time-saving advantage of immediate access to VELUX specifications, product drawings, and sunroom plans.

Phone for Your Own Free Copy

You can receive yours simply by calling 1-800-88-VELUX. Give our toll-free phone number a ring and we'll send you a VELCAD Software Package completely free. It's just one way of saying thank you for specifying VELUX products.



Easy-to-use VELCAD is the only CAD software designed exclusively for roof windows and skylights.

VELUX &
VELCAD

Roof
Windows

Ventilating
Skylights

Fixed
Skylights

Accessories
& Control
Systems

Installation,
Flashings &
Glazings



Model TPS Roof Windows accent any room beautifully.

Specifications

Thermal Performance of VELUX Roof Windows & Skylights

Glazing Type	Glazing "U" Value BTU/HrSqFt°F	Glazing "R" Value BTU/HrSqFt°F	Unit "U" Value	Unit "R" Value
48 - Double Insulated, Tempered	0.53	1.89	0.52*	1.92
75 - Double Insulated, Tempered, Low-E Argon Gas-Filled	0.28	3.57	0.40*	2.50
77 - Double Insulated, Tempered, Low-E Argon Gas-Filled, Bronze Tint	0.28	3.57	0.38**	2.63
74 - Double Insulated, Tempered, Laminated, Low-E Argon Gas-Filled	0.32	3.13	0.40**	2.50
79 - Double Insulated, Tempered, Laminated, Low-E Argon Gas-Filled, Bronze Tint	0.32	3.13	0.40**	2.50

*Above figures for unit values are actual test values for TPS 606 (44¾" x 46½"). Units were tested with the following conditions: 68°F inside air temperature and 18°F outside air temperature with 15 mph wind.

**Calculated "U" and "R" Value based on actual test results with TPS 606 (44¾" x 46½") with insulated, Low-E gas-filled, tempered glass.

Roof

Model
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Model TPS

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Shading
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(Glazing)

0.89

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0.75

0.64

0.68

0.50

weight (s

ip. glass)



Roof Windows

Model TPS™ Roof Window

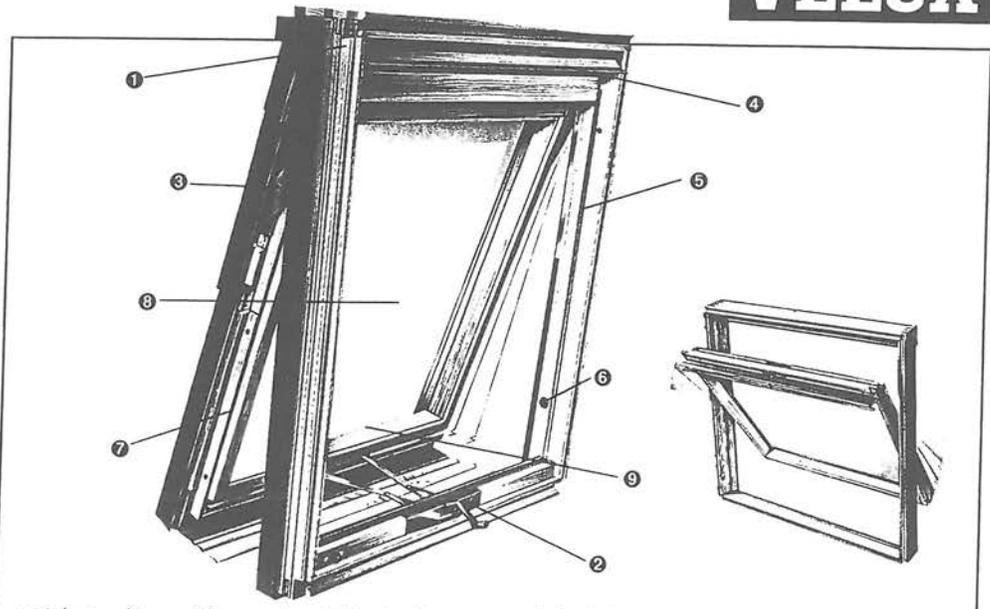
Product Presentation
The top-hung Model TPS™ Roof Window is ideal for in-reach applications such as attics and above garage bonus rooms. The sash can be rotated for safe and easy cleaning of outside glass from the inside. And for out-of-reach applications, manual and electric controls are available. VELUX Roller Shades, Venetian Blinds (manual or electric) and Exterior Awnings are also offered. (See Accessories & Electric Control Systems, page 10.)

Model GGL™ Roof Window

Product Presentation
The Model GGL Roof Window is available in two large sizes. The GGL 410 and GGL 808. Both have special center-mounted hinges and an overhead control bar providing a large unobstructed opening to meet minimum egress requirements as indicated by UBC, BOCA, SBCCI model building codes. For specific egress information and building code compliance, consult your local building code official.

Uses/Applications

Designed for installation in roofs with a pitch of 18-1/2 degrees (4/12) to 85 degrees. For roof pitches between 10 degrees (2/12) and 18-1/2 degrees (4/12), Type VPL Curb Flashing is available. For roof pitches of 10 degrees to 10 degrees (2/12), there is the new Type ECX Flat Roof Curb (not available for Model GGL).



- ❶ Select quality wood frame and sash. Unpainted, factory-impregnated with clear preservative. Built with mortise and tenon joints, then glued and nailed for strength, tightness and durability. All exterior surfaces protected with roll-formed aluminum cladding, coated with the most durable weatherproof paint on the market: Kynar 500® polyvinylidene fluoride resin. Copper cladding also available.
- ❷ Exclusive scissor operator with stainless steel arms secures the sash at two points on window for a tight and weatherproof close. Open and close with standard hand crank, Manual Control Rod, Motorized Control Rod or the Electric Control System.
- ❸ Top hung sash, spring assisted operation, coated steel pivoting hinges. Intermediate sash construction allows for complete sash rotation. Also allows sash removal for easy installation and possible glass replacement.
- ❹ Exclusive Ventilation Flap with easy-to-clean filter provides limited ventilation when window is closed and also helps reduce possible condensation. This flap can be operated to bring fresh air inside, even when it's raining outside.
- ❺ Easy-to-remove integrated insect screen of gray fiber screen cloth. Metallic beige aluminum frame is color coordinated with thru-screen operator.
- ❻ Barrel bolts allow secure positioning of sash when pivoted for ease of cleaning.
- ❼ Factory-applied neoprene weather stripping throughout sash and frame exceeds the requirement of the AAMA 1600-90 Voluntary Specifications for skylights for prevention of air and water infiltration.
- ❽ Glazing is dual-sealed, double-pane glass having 5/8" total thickness. Available for quick delivery in tempered clear, tempered or laminated gas-filled Low-E, tempered or laminated gas-filled Low-E bronze tint.
- ❾ Special gasket along bottom sill allows possible condensation to drain to the outside.

Model TPS	104	106	304	308	606	Model GGL	410	808
Outside frame (w x h) in. mm	21 1/2 x 38 1/2 (546 x 978)	21 1/2 x 46 1/2 (546 x 1180)	30 5/8 x 38 1/2 (778 x 978)	30 5/8 x 55 (778 x 1398)	44 3/4 x 46 1/2 (1136 x 1180)		37 x 63 (940 x 1600)	52 5/8 x 55 (1338 x 1398)
Rough opening (w x h) in. mm	21 1/2 x 39 (546 x 991)	21 1/2 x 47 (546 x 1194)	30 1/2 x 39 (775 x 991)	30 1/2 x 55 1/2 (775 x 1410)	44 3/4 x 47 (1136 x 1194)		37 1/2 x 63 1/2 (953 x 1613)	53 1/8 x 55 1/2 (1349 x 1410)
Rough opening for VPL Curb Flashing (w x h) in. mm	22 x 50 (559 x 1270)	22 x 60 (559 x 1524)	31 1/8 x 50 (791 x 1270)	31 1/8 x 71 (791 x 1803)	45 1/4 x 60 (1149 x 1524)		37 1/2 x 82 (953 x 2083)	53 1/8 x 71 (1349 x 1803)
Rough opening for ECX Flat Roof Curb (w x h) in. mm	21 x 45 7/8 (533 x 1165)	21 x 54 1/4 (533 x 1378)	30 1/16 x 45 7/8 (763 x 1165)	30 1/16 x 63 3/16 (763 x 1608)	44 1/4 x 54 1/4 (1123 x 1378)		N/A	N/A
Daylight area (glass) (w x h) in.	14 3/8 x 27 1/16	14 3/8 x 35 1/16	23 7/16 x 27 1/16	23 7/16 x 44 7/16	37 5/8 x 35 1/16		30 1/16 x 53 3/16	45 3/4 x 45 1/4
Daylight area	sq. ft. 2.79	3.56	4.67	7.23	9.34		11.10	14.34
Ventilation area (opening)	sq. ft. 2.51	2.89	3.98	5.14	5.44		12.55	15.92
Ventilation Flap area	sq. in. 15.31	15.31	24.93	24.93	40.00		36.70	55.82
Net weight (with temp. glass)	lbs. 57.3	63	70	92.5	108		104	132

VELUX &
VELCAD

Roof
Windows

Ventilating
Skylights

Fixed
Skylights

Accessories
& Control
Systems

Installation,
Flashings &
Glazings

Specifications



Model VS Skylights bring natural light and dramatic effect to this master bedroom.

Ventilating

Model VS⁺ Ventilating

App/Product
The Model VS⁺ is designed specifically for applications. It offers the craftsmanship and operability to make it easy to re-install the skylight to work on the roof. The Model VS⁺ Manual Control or the Electric Control (with remote control) are also available.

App/Uses/App
Designed for applications with roof pitches between 18-1/2 degrees and 18-1/2 degrees. Flashing is available for applications with roof pitches from 10 degrees to 10 degrees. Type ECX Flashing

Model VS

Inside frame

High opening

High opening for
Curb Flashing

High opening for
Flat Roof Cur

Light area (gl

Light area

Light area (with
flashing)

Weight (with
flashing)



Ventilating Skylights

Model VS™ Ventilating Skylight

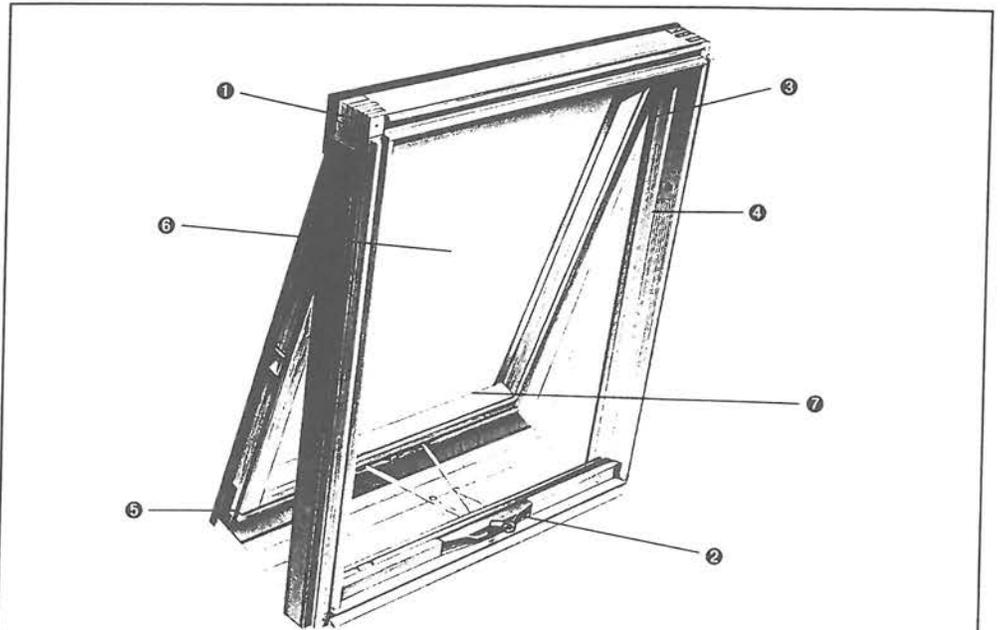
Product Presentation

The Model VS Ventilating Skylight is designed specifically for out-of-reach applications. It offers the same attention to quality and craftsmanship as our Roof Windows. As with all operable VELUX units, special hinges make it easy to remove the sash, allowing you to install the Model VS without having to work on the roof. New this year to the Model VS lineup is the size 101.

The Model VS can be operated by either a Manual Control Rod, Motorized Control Rod or the Electric Control System. Roller Shades and Venetian Blinds (manual or electric) are also available. (See Accessories & Electric Control Systems, page 10.)

Uses/Applications

Designed for installation in roofs with a pitch of 18-1/2 degrees (4/12) to 85 degrees. For roof pitches between 10 degrees (2/12) and 18-1/2 degrees (4/12), Type VPL Curb Flashing is available. For roof pitches of 0 degrees to 10 degrees (2/12), there is the new Type ECX Flat Roof Curb.



① Select quality wood frame and sash. Unpainted, factory-impregnated with clear preservative. Built with mortise and tenon joints, then glued and nailed for strength, tightness and durability. All exterior surfaces protected with roll-formed aluminum cladding, coated with the most durable weatherproof paint on the market: Kynar 500 polyvinylidene fluoride resin. Copper cladding also available.

② Exclusive scissor operator with stainless steel arms secures the sash at two points on window for a tight and weatherproof close. Open and close with Manual Control Rod, Motorized Control Rod or the Electric Control System.

③ Exclusive coated steel hinges allow sash removal for easy installation and possible glass replacement.

④ Easy-to-remove integrated insect screen of gray fiber screen cloth. Metallic beige aluminum frame is color coordinated with thru-screen operator. Fastened with spring bolts so that it can be easily removed for an unobstructed view or to clean glass.

⑤ Factory-applied neoprene weather stripping throughout sash and frame exceeds the requirement of the AAMA 1600-86 H Voluntary Specifications for skylights for prevention of air and water infiltration.

⑥ Glazing is dual-sealed, double-pane glass having 5/8" total thickness. Available for quick delivery in tempered clear, tempered or laminated gas-filled Low-E, tempered or laminated gas-filled Low-E bronze tint.

⑦ Special gasket along bottom sill allows possible condensation to drain to the outside.

Model VS		101	104	106	108	304	308	601	606
Outside frame (w x h)	in. mm	21 1/2 x 27 1/2 (546 x 699)	21 1/2 x 38 1/2 (546 x 978)	21 1/2 x 46 1/2 (546 x 1180)	21 1/2 x 55 (546 x 1398)	30 3/8 x 38 1/2 (778 x 978)	30 3/8 x 55 (778 x 1398)	44 3/4 x 27 1/2 (1136 x 699)	44 3/4 x 46 1/2 (1136 x 1180)
Rough opening (w x h)	in. mm	21 1/2 x 28 (546 x 711)	21 1/2 x 39 (546 x 911)	21 1/2 x 47 (546 x 1194)	21 1/2 x 55 1/2 (546 x 1410)	30 1/2 x 39 (775 x 991)	30 1/2 x 55 1/2 (775 x 1410)	44 3/4 x 28 (1136 x 711)	44 3/4 x 47 (1136 x 1194)
Rough opening for VPL Curb Flashing (w x h)	in. mm	22 x 36 (559 x 914)	22 x 50 (559 x 1270)	22 x 60 (559 x 1524)	22 x 71 (559 x 1803)	31 1/8 x 50 (791 x 1270)	31 1/8 x 71 (791 x 1803)	45 1/4 x 36 (1149 x 914)	44 1/4 x 60 (1149 x 1524)
Rough opening for ECX Flat Roof Curb (w x h)	in. mm	21 x 34 1/4 (533 x 870)	21 x 45 7/8 (533 x 1165)	21 x 54 1/4 (533 x 1378)	21 x 63 5/16 (533 x 1608)	30 1/16 x 45 7/8 (763 x 1165)	30 1/16 x 63 5/16 (763 x 1608)	44 1/4 x 34 1/4 (1123 x 870)	44 1/4 x 54 1/4 (1123 x 1378)
Daylight area (glass) (w x h)	in.	14 3/4 x 20 1/8	14 3/4 x 31 1/16	14 3/4 x 38 1/16	14 3/4 x 47 9/16	23 3/4 x 31 1/16	23 3/4 x 47 9/16	37 1/16 x 20 1/8	37 1/16 x 38 1/16
Daylight area	sq. ft.	2.06	3.18	3.99	4.87	5.12	7.85	5.30	10.26
Ventilation area (opening)	sq. ft.	1.82	2.35	2.71	3.14	3.76	4.84	3.07	5.19
Net weight (with temp. glass)	lbs.	38	44	53	62	62	75	63	90

VELUX &
VELCAD

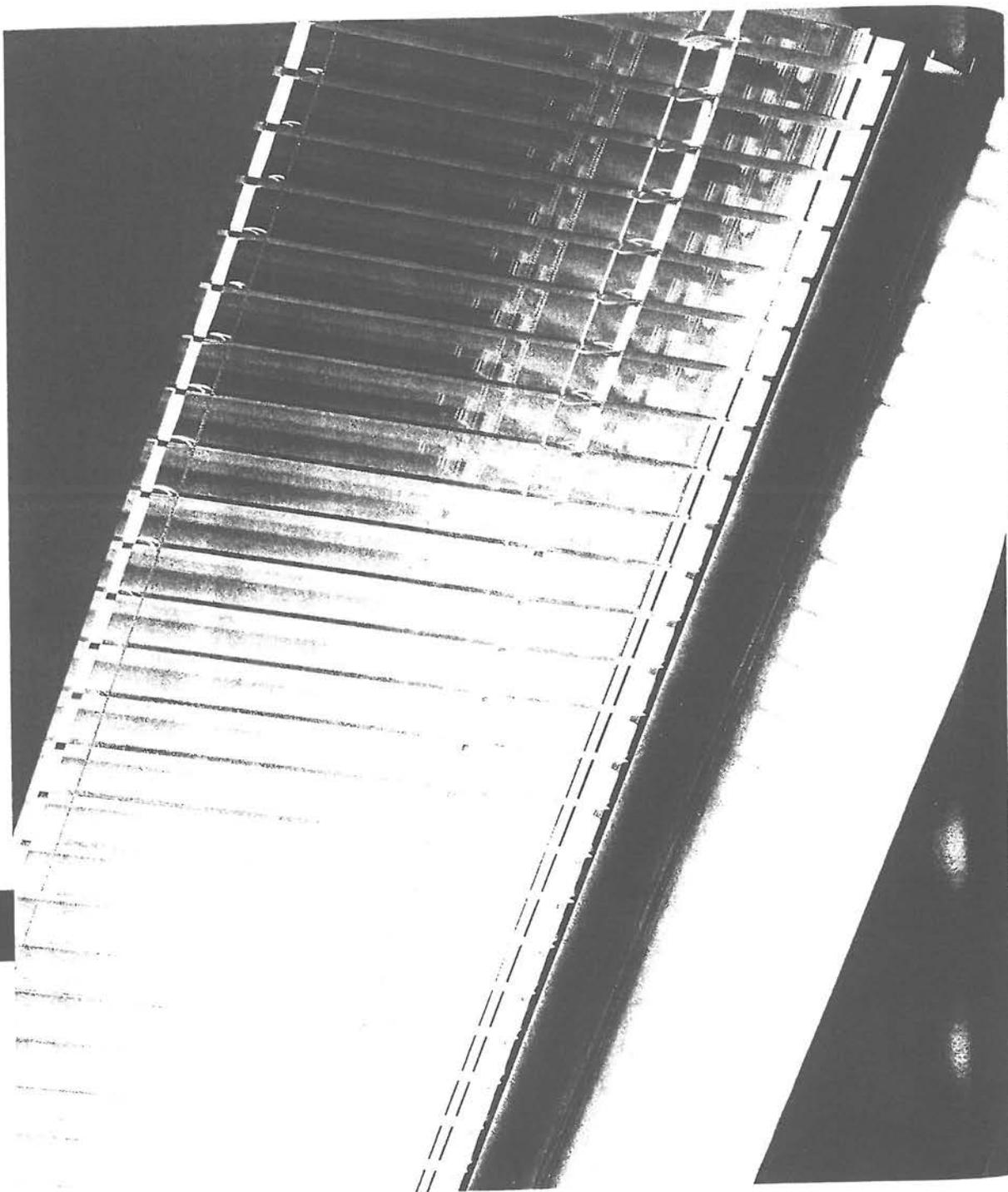
Roof
Windows

Ventilating
Skylights

Fixed
Skylights

Accessories
& Control
Systems

Installation,
Flashings &
Glazings



New full-function Electric Venetian Blinds give you precision control of light and view.

Thermal Performance of VELUX Sunscreening Accessories

(For technical data regarding sunscreening accessories used with glazing other than the Type 48 listed here, contact VELUX Regional Office)

VELUX Accessories with Type 48 Glazing	BTU/HrSqF°F "U" Value	BTU/HrSqF°F "R" Value	Shading Coefficient	% Light Transmittance
48 - Double Insulated, Tempered	0.52†	1.92†	0.89	0.82
RAS - Beige Roller Shade	0.43**	2.33	0.44	0.21
PDS - Venetian Blind with Thermostop Slats	0.41**	2.44	0.33	—
MAS - Exterior Awning	0.52**	1.92	0.33	0.28

†Above figures for unit values are actual test values for TPS 606 (44¾" x 46½") with insulated Low-E gas-filled, tempered glass and sunscreening accessories in the closed position. Units were tested with the following conditions: 68°F inside air temperature and 18°F outside air temperature with 15 mph wind.
**Calculated "U" and "R" Value based on actual test results with TPS 606 (44¾" x 46½") with insulated Low-E gas-filled, tempered glass.

Specifications

Accessori

Accessorie:

PP/Product F
Roller Shades
available in two s
cotton/poly ester f
filtered light, and
blocks out most o
come complete w
cord pulley, Type
able for use with
Control Rod.

Venetian Blinc
models, include TI
reduce heat gain
winter. One side
Thermostop mate
white color. This
Venetian Blinds c
our new full-funct
These let you shc
minimal effort, no
coated. This full-f
raise, lower or til
button. Choose f
ES 310 or KES
to power your El
sources also car
our exclusive Ve
Venetian Blinds
or manually.

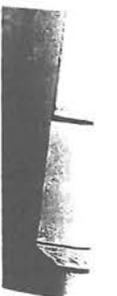
Awning for
Windows are m
charcoal fit or s
operated from i
Awning block
summer heat, w

Type ZCZ 040 6

Type ZCZ 021 2

Type ZMZ 006
rechargeable IV

Type ZCZ 030



Roller Shade



Accessories & Electric Control Systems

Accessories

PP/Product Presentation

Roller Shades for all models are available in two styles: a beige, natural cotton/polyester fabric for privacy and soft, filtered light, and a "Twilight" Shade that blocks out most of the outdoor light. Shades come complete with pull cords. An optional cord pulley, Type ZAZ 090, is also available for use with the Manual or Motorized Control Rod.

Venetian Blinds, available for all models, include Thermostop-coated slats which reduce heat gain in summer and heat loss in winter. One side of slat is coated with metallic Thermostop material, the other is an eggshell-white color. This year VELUX has taken Venetian Blinds one step further and created our new full-function Electric Venetian Blinds. These let you shade or light a room with minimal effort, no matter where the blinds are located. This full-function advantage lets you raise, lower or tilt blinds with the push of a button. Choose from a WindowMaster® KES 310 or KES 160 Electric Control System to power your Electric Venetian Blinds. Power sources also can be used to open and close our exclusive Ventilation Flap on Model FSF. Venetian Blinds may be operated electrically or manually.

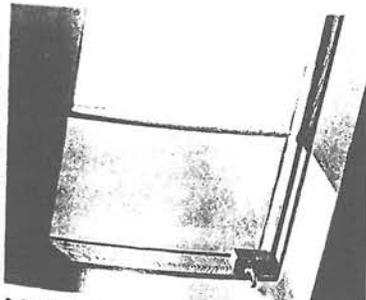
Awnings for Model TPS and GGL Roof Windows are made of a semitransparent, charcoal fiber screen material. Manually operated from inside the room, the Exterior Awnings block out more than 70% of the summer heat, without blocking the view.

Type ZCZ 040 6'-10" Telescopic Rod

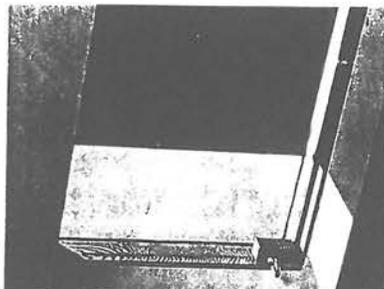
Type ZCZ 021 2' Rod Extensions

Type ZMZ 006 Rechargeable Motorized Handle

Type ZCZ 030 Manual Rod



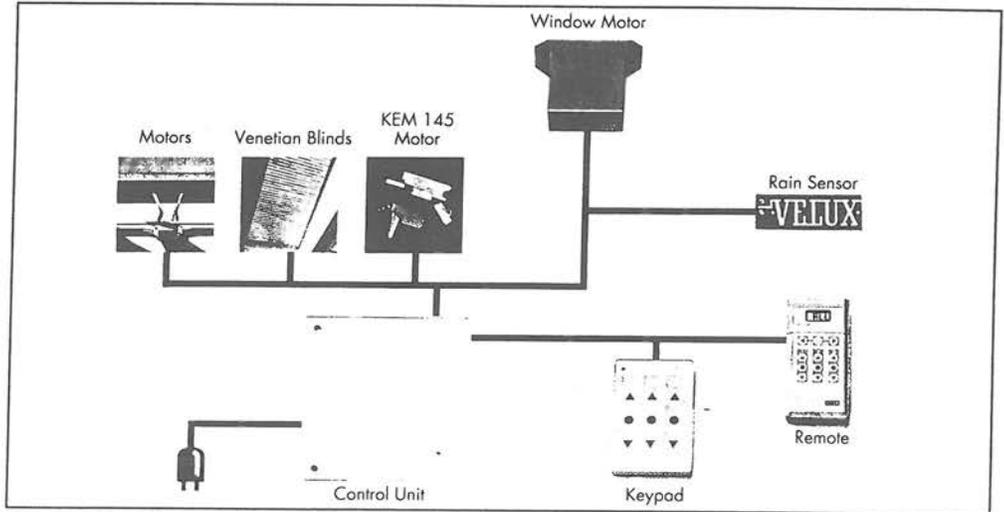
Roller Shade for suncreening.



Twilight Shade for privacy.



Awning for the Model TPS Roof Window blocks summer heat.



Cord Pulley, Type ZAZ 090, eliminates having a Roller Shade or Awning cord hanging down in the room. It attaches to the window and allows easy overhead operation of the suncreening accessories with the aid of a Manual or Motorized Control Rod.

Manual and Motorized Control Rods are offered in three different types for opening and closing skylights and operating suncreening accessories. Type ZMZ 006 is a rechargeable Motorized Control Rod that operates with the push of a button. Type ZCZ 030 is our six-foot, easy-to-use Manual Control Rod. Type ZCZ 021 is a two-foot rod extension used for lengthening both Type ZMZ 006 and Type ZCZ 030. Type ZCZ 040 is our six-to-ten-foot Telescopic Rod for operating the Model FSF Ventilation Flap and Venetian Blind.

Electric Control Systems

PP/Product Presentation

Electric Control System - WindowMaster KES 310 System allows you to open and close windows and control Venetian Blinds with a simple touch of a button. You can even add a rain sensor to each window, up to three per control panel, and have your window close at the first drop of rain. You

can also custom design the KES 310 System to fit the specific needs of each house.

The WindowMaster KES 310 System consists of a control unit (110/24 VAC), keyboard and rain sensor. And its simple design makes installation easy.

Basically, a small motor must first be mounted to the window and its cable connected to the KES 310 Control Unit. Color codes indicate precisely where the window motor, keyboard and rain sensor cables should be connected. Then the control unit is plugged into a wall outlet, and the system is ready for use.

The WindowMaster KEZ 150 Battery Backup, available as a supplement, ensures operation if there is an interruption in the power supply.

WindowMaster Electric Motors KEM 140 and KEM 110 attach separately to roof windows or operable skylights and work in conjunction with the KES 310 System, allowing windows to be opened and closed.

WindowMaster KEM 145 easily attaches to the Ventilation Flap on Model FSF and works in conjunction with either the KES 310 or KES 160 Systems, allowing the flap to be opened or closed with the push of a button.



Installation - Flashings & Glazings

Roof Windows

Pre-installed Mounting Brackets / Parts

Pre-installed Mounting Brackets, patented by VELUX, eliminate the need to remove cladding and mount the brackets before installation. This feature makes installation smoother and faster—saving you valuable time and money.



Ventilating Skylights

Flashings

Type EDL Step Flashing is for use with thin roofing materials, such as asphalt or fiberglass



shingles, slates, cedar shingles/shakes. Requires no caulk or sealants. For roof pitches from 18-1/2 degrees (4/12) to 85 degrees.

Fixed Skylights

Type EDH High Profile Flashing is designed for high profile roofing materials including

concrete tiles, Spanish tiles and corrugated roofing – roof styles growing in popularity in warm, sunny places such as Florida, Texas and California. The patented sill flashing piece



is fabricated with a new coated lead apron which can be folded and formed across the high profile roofing material. Suitable for roof pitches from 18-1/2 degrees (4/12) to 85 degrees.

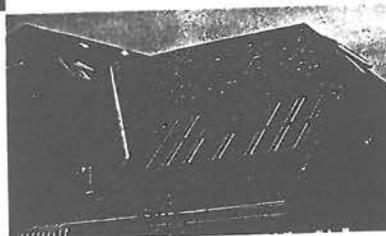
Accessories & Control Systems

Type VPL Curb Flashing Systems are for roofs with a pitch less than 18-1/2 degrees (4/12). Use Type VPL when the pitch is between 10 degrees (2/12) and 18-1/2 degrees (4/12).



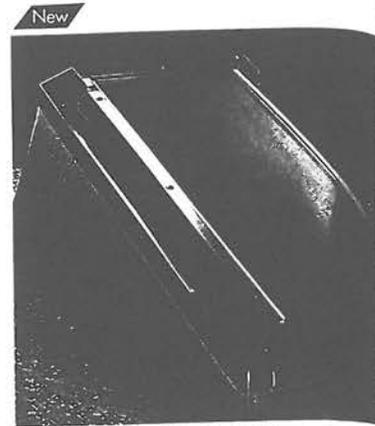
Installation, Flashings & Glazings

Specifications



Combi-flashing lets you group roof windows and skylights together for effect.

New this year, Type ECX Flat Roof Curb brings the beauty of VELUX Roof Windows and Skylights to any flat roof by creating a roof pitch suitable for quick and easy installation. Type ECX Flat Roof Curb comes completely prefabricated and ready to be assembled on site. Its factory-applied insulation means that Type ECX Flat Roof Curb is ready to receive drywall and works with the types of materials used in flat-roof construction, such as, tar and gravel, rubber membrane and torch down. Suitable when roof pitch is between 0° and 10° (2/12).



The New Type ECX Flat Roof Curb

Type EKL and EKH Combi-Flashing™ is offered prefabricated by VELUX for grouping

Roof Window installation measurements for different roof pitches

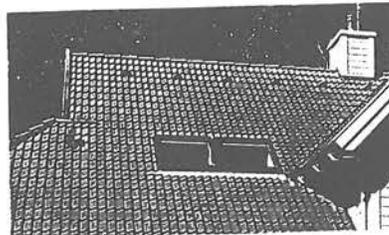
Size No.	104 & 304				106 & 606				308 & 808*				410*			
Window height (in inches)	38 1/2				46 1/2				55				62 7/8			
Installation height (in inches)	74	76	78	80	74	76	78	80	74	76	78	80	74	76	78	80
Height for clear view (in inches – from top of bottom rail to floor)																
30°	60	62	64	66	56	58	60	62	52	54	56	58	48	50	52	54
35°	58	59	62	64	53	55	57	59	48	50	52	54	44	46	48	47
40°	55	57	59	61	50	52	54	56	44	46	48	50	39	41	43	45
45°	52	54	56	58	47	49	51	53	41	43	45	47	35	37	39	41
50°	50	52	54	56	44	46	48	50	37	39	41	43	31	33	35	37

*Available Model GGL only.

windows together. This complete modular system enables designs for side-by-side installations of windows of the same height and over-and-under installations of windows of the same width - for both thin, (EKL), and high-profile, (EKH), roofing materials.

Side-by-side flashings are available in spacings from 2-1/2" to 12" in 1/2" increments.

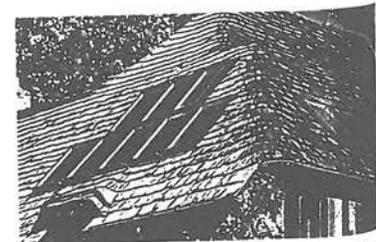
For spacing over 12" standard VELUX Flashing can be used. Available only in 4" spacings for over-and-under installations.



Type EDH High Profile Flashing brings the beauty of roof windows and skylights to homes with high profile roofing material.

Glazings

At VELUX, we don't just sell you a skylight with a standard glazing package. Instead we offer a wide choice of glazing options. That's because we understand that choosing the glazing that best fits your needs is just as important as choosing the right window.



Type EDL Step Flashing is perfect for thin roofing material such as cedar shakes.

Glaz

Temperex Glazing This unit glazed w dual-seal

Temperex Glazing This unit glass. The reduce ul further im

Temperex Glazing This unit and also

Temperex Glazing This uni energy e

Temperex Glazing This un bronze t

"U" VALL Lower va heat flow of ultravie Shading c shading e of double Note: "U

Shafts



Beveling it enough



Glazings

	"U" Value	"R" Value	UV Blockage	Shading Coefficient
Tempered, Clear Glazing Code 48	0.53	1.89	35%	0.89

This unit consists of clear tempered glass, which is significantly stronger than annealed glass. It is glazed with two panes of glass, as are all VELUX Roof Windows and Skylights. We also insulate and dual-seal every unit for energy efficiency in our state-of-the-art glass plant.

Tempered, Low-E Argon Gas-Filled Glazing Code 75	0.28	3.57	60%	0.75
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This unit has an exterior pane of clear tempered glass with an interior pane of Low-E coated tempered glass. The Low-E coating will help retain heat in the winter, reduce heat gain in the summer and also reduce ultraviolet ray transmission. We also inject clear odorless argon gas between the panes to further improve the unit's energy efficiency.

Tempered, Low-E Argon Gas-Filled, Bronze Tint Glazing Code 77	0.28	3.57	65%	0.64
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This unit combines Low-E coated glass with bronze tint tempered glass to reduce heat gain year-round and also reduce ultraviolet ray transmission.

Tempered over Laminated, Low-E Argon Gas-Filled Glazing Code 74	0.32	3.13	99.9%	0.68
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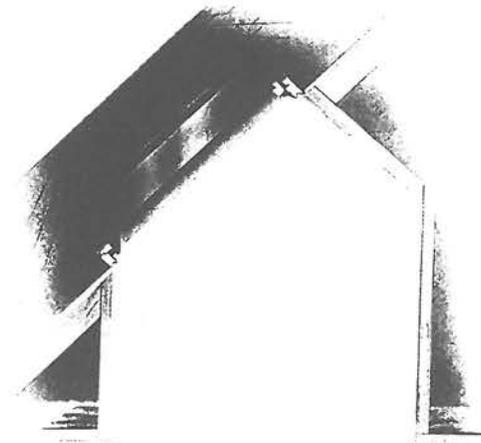
This unit combines tempered Low-E coated glass with laminated glass to afford you all the energy efficiency of Low-E coatings in areas that require laminated glass.

Tempered over Laminated, Low-E Argon Gas-Filled, Bronze Tint Glazing Code 79	0.32	3.13	99.9%	0.50
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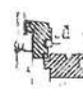
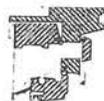
This unit combines tempered bronze tint glass with laminated glass giving you the benefits of bronze tint coating in areas that require laminated glass.

"U" VALUE - The total heat flow through the entire glazing assembly from room air to outside air. Lower values indicate greater insulating capability. **"R" VALUE** - The resistance a material has to heat flow. Higher numbers indicate greater insulation capability. **UV Blockage** - The reduction of ultraviolet ray transmission. These values are approximate as supplied by glazing manufacturer. **Shading Coefficient** - A measure of heat gain through glass from solar radiation. Specifically, the shading coefficient is the ratio between the solar heat gain from a particular type of glass and that of double strength glass. The lower the shading coefficient, the lower the solar heat gain.

Note: "U" and "R" values shown are for glazings only as supplied by glass manufacturer.



Top Section Left Section Right Section Bottom Section



Model TPS



Model VS

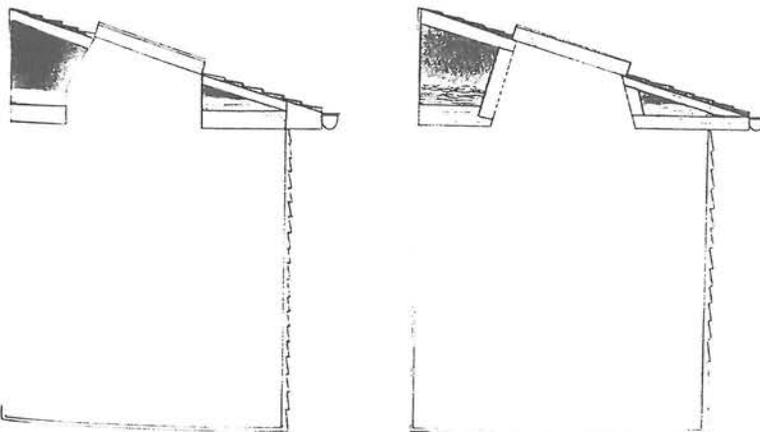


Model FSF



Model FS

Shafts



Beveling the shaft brings in plenty of light and provides enough room for removing the insect screen.

For optimum light distribution and more attractive appearance, flaring the light shaft is an economical way to take a small window and make it seem larger.

VELUX®

Part 2 Products

2.01 Manufacturer

A. VELUX-AMERICA INC. product models and flashing systems as specified in this section and as manufactured by VELUX-AMERICA INC.

2.02 Materials

A. Wood: Select kiln-dried solid and clear Douglas Fir. No finger joints, preservative impregnated for transparent or opaque exterior finish.

B. Maintenance-free exterior cladding: Roll-formed (0.65 aluminum) (0.60 copper) prefinished production engineered and fabricated to fit exterior exposed surfaces.

2.03 Components

A. Weather stripping: Factory-applied neoprene weather stripping throughout entire frame and sash profiled to effect weather seal.

B. *Screen: Aluminum screen profile, spring bolt attachment, 18 X 16 grey fiberglass screen mesh.

C. Fittings: Surface treatment with electro-galvanized, chromate passivated yellow.

Mounting brackets: Factory-installed stamped steel, surface treatment electro-galvanized, chromate passivated yellow.

E. Flashings are prefabricated systems, designed for use with various roofing materials and for slopes of 10 degrees (2/12) to 85 degrees.

2.04 Glass and glazing materials

A. Standard 5/8" overall dual-sealed insulated glass unit with 3/8" air space. Aluminum spacer with desiccant, primary seal polyisobutylene, secondary seal polysulfate.

E. Gasketing: Each I.G. unit dry glazed with chloroprene gasket, no sealants.

C. Glazing options include Low-E gas-filled tempered or laminated, Low-E gas-filled bronze tint tempered or laminated, or clear tempered.

2.05 Hardware

A. *Sash: Top-hinged, spring-assisted, pivoting. Pivoting hinges allow for sash removal.

B. **Scissor operator: Geared, rotary handle, stainless steel arms fitted to sash in extruded aluminum slide rail with limit stops, collapsible mechanism allows for sash separation.

2.06 Fabrication

A. Fabricate frame and sash with mortise and tenon joints, glued and nailed for hairline, weathertight fit.

B. Fabricate frame components within minimum tolerances enabling installation and movement of sash and dynamic movement of perimeter weather stripping.

C. Permit external drainage channels to migrate moisture to exterior. Provide internal drainage of glazing spaces to exterior through gasketing.

D. **Assemble insect screen of rolled aluminum rectangular sections. Miter and reinforce frame corners. Fit mesh and secure with vinyl spline, insect screen to be fitted with two spring-loaded retainer pins.

E. All units factory-glazed with chloroprene gasketing.

2.07 Finishes

A. Exterior surfaces: Exposed exterior wood surface to be covered with roll-formed maintenance-free cladding pieces. Aluminum has umber grey, Kynar 500 polyvinylidene fluoride resin finish. Copper is roll-formed mill finish.

B. Maintenance-free flashing: Roll-formed aluminum, umber grey, baked-on polyester polyamid primer and finish coats. Copper is roll-formed mill finish.

C. Interior surface: All exposed interior wood surfaces to be clear unfinished wood.

D. **Screens: Frames – metallic beige, mesh – grey.

E. **Operator – Metallic beige.

Part 3 Execution

3.01 Examination

A. Verify rough opening dimensions and proper orientation of roof window.

3.02 Installation

A. Install units in accordance with manufacturer's installation instructions.

*Model TPS Roof Window data only. For information on other models, contact VELUX-AMERICA INC.
**Venting Models only.

Specifications

Part 1 General

1.01 Section includes

A. Production fabricated wood Roof Windows and Skylights, exterior maintenance-free cladding, electrically/manually operated accessories as indicated on window schedule.

1.02 Reference standards

A. ANSI/ASTM E 283 – Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors.

B. ANSI/ASTM E 330 – Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.

C. ANSI/ASTM E 331 – Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Static Air Pressure Difference.

D. AAMA 1600 - 90 – Voluntary Specifications for Skylights.

E. ICBO Evaluation Services, Inc. – Acceptance Criteria for Sloped Glazing in Solariums, Patio Covers, and Prefabricated Skylights.

F. AAMA 1302.5 – Resistance to Forced Entry.

G. AAMA 1503.1 - 88 – Condensation Resistance Factor.

H. ANSI/ASTM C236 – Steady State of Thermal Performance of Building Assemblies by Means of a Guarded Hot Box.

I. CABO – National Evaluation Service Committee Report No. NER-216.

1.03 Quality assurance

A. Wood Roof Windows and Skylights with exterior maintenance-free cladding and all accessories and components required for complete and weatherproof installation shall be manufactured to the highest standards of quality and craftsmanship in accordance with VELUX Manufacturing Standards.

1.04 System description

A. Roof Windows/Skylights: Wood frame and sash, exterior maintenance-free cladding, production fabricated, flashings, glazings and anchorage.

1.05 Performance requirements

A. *Model TPS Roof Window to withstand dead and live loads caused by pressure and uplift of wind acting normal to plane of roof and tested in accordance with ICBO Evaluation Services, Inc. Acceptance Criteria for Sloped Glazing in Solariums, Patio Covers and Prefabricated Skylights to a design pressure of 34-132 psf and an uplift pressure of 22-173 psf as measured in accordance with ANSI/ASTM E 330.

B. Limit member deflection to flexure limit of glass with full recovery of glazing materials.

C. **System to accommodate, without damage to components or deterioration of seals, movement between sash and frame and perimeter framing.

D. *Air leakage through assembly limited to 0.41 CFM/ft of total unit inside perimeter, measured at a reference differential pressure across assembly of 1.57 psf as measured in accordance with AAMA 1600-90 and ANSI/ASTM E 283.

E. *Water infiltration: No water penetration noted when measured in accordance with AAMA 1600-90 and ANSI/ASTM E 331 with a test pressure differential of 6.0 psf.

F. Gasketing designed to drain water entering joints, condensation occurring in glazing channel, or migrating moisture occurring within system, to exterior by weep drainage network.

1.06 Submittals

A. Manufacturers unit dimensions, rough opening and finished framing dimensions, affected related work and installation requirements are shown in manufacturer's installation instructions.

1.07 Delivery, handling, storage

A. Deliver products in manufacturer's original containers, dry, undamaged, seals and labels intact.

Roof
Windows

Ventilating
Skylights

Fixed
Skylights

Accessories
& Control
Systems

Installation,
Flashings &
Glazings

Part 2 Pr

2.01 Manu

A. VELUX-A models and i this section: a VELUX-AME

2.02 Mate

A. Wood: Se Douglas Fir. I impregnated interior finish.

B. Maintenanc roll-forme (C prefinished pr fabricated to l

2.03 Comp

A. Weather st neoprene wec entire frame a weather seal.

B. *Screen: Al roll attachmen screen mesh.

C. Fittings: Sur galvanized, ch

D. Mounting b zamped steel,

E. galvanized, ch

F. Flashings are designed for us

G. materials and fr

H. 12) to 85 de

2.04 Glass a

A. Standard 5/ insulated glass i

B. -minum spac ed polyisobuty

C. polysulfate.

D. Gasketing: E neoprene ga:

E. Glazing opti

F. ordered or lan

G. size tint temp

H. ordered.