EVERGREEN HOUSE, INC.
ASTM E283-04, E331-00, & E330-02 TESTING
SLOPED GLAZED
SKYLIGHT SYSTEMS

QTI FILE NO. S2006-484

QUALITY TESTING INC.
3310 Hill Avenue • Everett, Washington 98201
Phone: (425)259-6799 • FAX: (425)259-4936

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3310 Hill Avenue, Everett, WA 98201
Phone: (425) 259-6799
FAX: (425) 259-4936
email: qualtest@premier1.net

ASTM AIR INFILTRATION, WATER RESISTANCE AND UNIFORM LOAD STRUCTURAL TEST REPORT

S2006-484

REPORT TO: EVERGREEN HOUSE, INC.
13645 N.E. 126TH PLACE
KIRKLAND, WA. 98034

ORIGINAL REPORT NUMBER: S2006-484
ORIGINAL REPORT DATE: 07/14/2006

PRODUCT: SLOPED GLAZED SKYLIGHT SYSTEM.

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email: qualtest@premier1.net

Report No: S2006-484

REPORT TO:	Evergreen House, Inc. 13645 N.E. 126th Place Kirkland, WA. 98034
TEST DATE:	07/14/2006
TEST STANDARDS:	ASTM E 283-04 Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen. ASTM E331-00 Test Method for Water Penetration of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference. STM E330-02 Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.
TEST RESULTS:	Passed. See test results page within this report for further details.

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DESCRIPTION OF SAMPLE TESTED

MODEL/TYPE:	Sloped glazed skylight system.
CONFIGURATION:	O
FRAME SIZE:	
OUTSIDE CURB DIMENSION:	44 3/8" wide by 95 3/8" high.
INSIDE CURB DIMENSION:	44" wide by 95" high.
FRAME TYPE:	Extruded solid aluminum.
JOINT CONSTRUCTION:	All interior frame corners were mitered, sealed and screw-connected. The exterior frame corners were fitted, sealed and riveted.
GLAZING COMPONENTS:	
OVERALL:	1 1/16" nominal.
GLASS THICKNESS:	One exterior pane of 6.0 mm(1/4") clear tempered. One exterior pane of 6.0 mm(1/4") clear heat strengthened laminated glass with a 0.030" PVB interlayer.
SPACER TYPE/SIZE:	1/2" nominal aluminum.
GLAZING SYSTEM:	The I.G. unit was set on the interior framing against 1/4" x 3/8" norton glazing tape and retained with exterior aluminum pressures caps. The exterior pressure caps were set against 1/8" x 3/8" glazing tape on the glass and the exterior framing and screw-connected through the top face into the integral screw race on the interior framing members. See drawings for details. Each short side used three 1 1/4" long screws spaced 16" apart and each long side used five 1 1/4" long screws spaced 16" apart.

ADDITIONAL DESCRIPTION: The sample was installed on a 2 x 6 wood curb and screw-connected through the interior frame members into the curb. Cross braces were installed by the test lab inside the curb between the two long sides to alleviate rolling of the curb during the Uniform Structural loads. 3/4" plywood was sealed and screw-connected to the bottom face of the curb, completely enclosing the system to complete the test chamber. A 2" hole was drilled into the plywood at the midpoint and a 2" quick connect flange was screw-connected over this hole. All pressures were applied from the interior side of the skylight using a cadillac blower and a 2" hose attached to the quick connect flange. The pressures were monitored using a Meriam Instruments inclined manometer with vinyl tubing as the pressure tap.

TEST RESULTS

Air Infiltration at 6.24 psf.
ASTM E283-04

Total CFM	<	0.10 CFM(Undetectable)
Infiltration Rate	<	0.01 CFM/ft^2(Undetectable)

Water Resistance Test.
ASTM E331-00

No Leakage after 1 cycle of 15 minutes at 15.00 psf.

Uniform Load Structural Test.
ASTM E330-02

No Damage after Positive 90.0 psf(Towards Interior/Download).
No Damage after Negative 90.0 psf(Towards Exterior/Uplift).

The results in this report were secured by using the designated test methods and are actual tested values which apply to the tested sample only, using the components and construction methods described herein. This report does not constitute certification of this product, which may only be granted by the Administrator of the Certification Program.

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Randal J. Van Voorst
President

Jeffrey M. Douglas
Structural Performance Technician

SKYLIGHTS

SOLARIUMS & GREENHOUSES

DESIGNERS & FABRICATORS

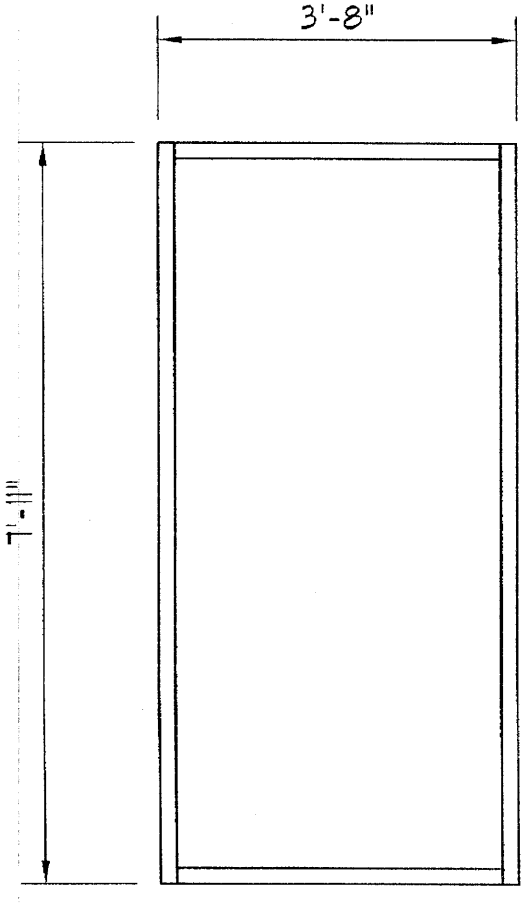
Since 1946

EVERGREEN HOUSE INC.

13645 NE 126th Place
Kirkland, WA 98034

(425) 821-1005
Fax (425) 823-5619

ASTM 283, 330 & 331 TEST



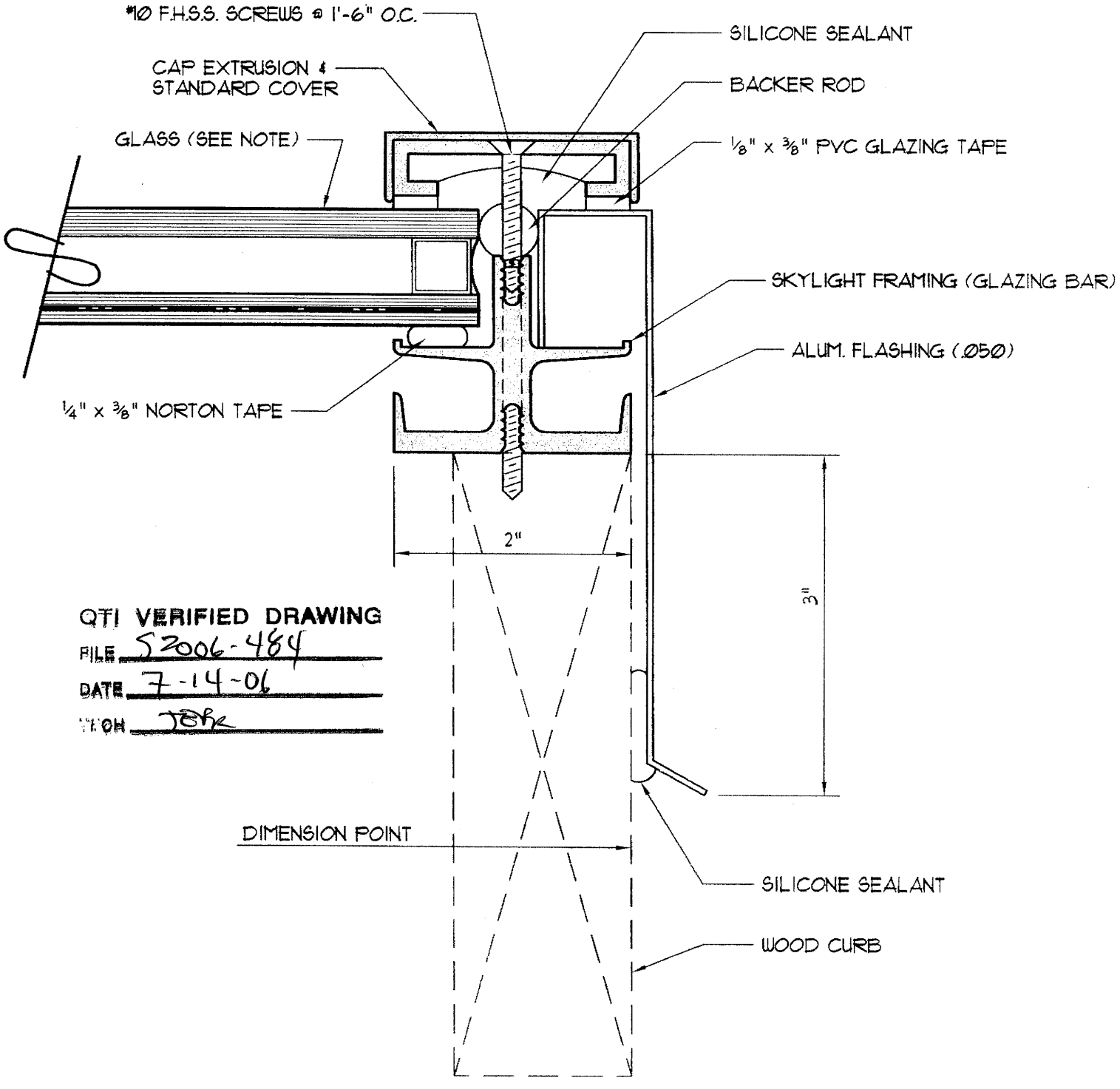
QTI VERIFIED DRAWING
FILE S2006-484
DATE 7-14-06
TECH JGK

SKYLIGHT PLAN

SCALE: ½"=1'-Ø"

NOTE:

Rafter Framing: Aluminum Spec 6005-T5
Other Framing: Aluminum Spec 6063-T5
Aluminum Finish: Factory-applied oven-baked Kynar Paint (Color by Arch. - Please Provide Sample)
Sloped Glazing: 1 1/16" O.A. (¼" Clear Tempered / ½" Air Space / ¼" Clear Heat Strengthened Laminated w/.030 PVB Interlayer)
Vertical Glazing: None



QTI VERIFIED DRAWING
FILE S2006-484
DATE 7-14-06
BY JBR

1 SKYLIGHT FRAMING DETAIL

SCALE: NTS

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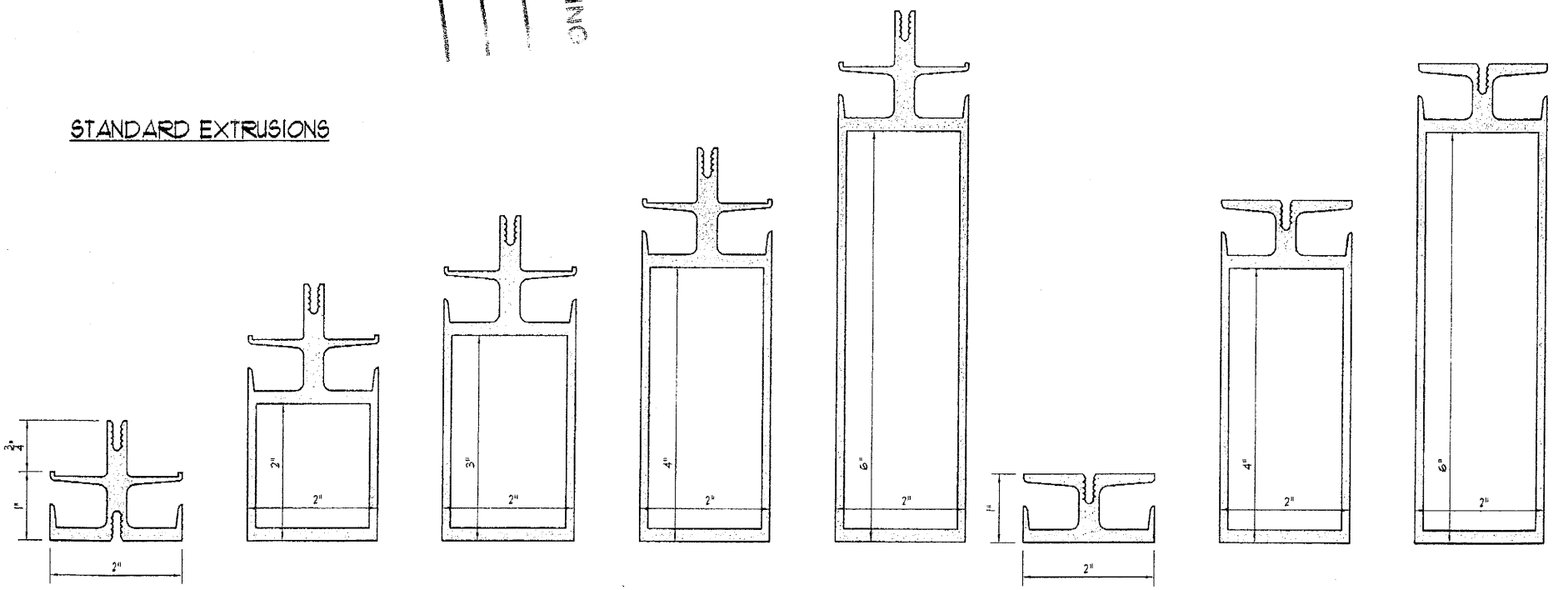
FILE 5'2006-484
DATE 7-14-06
CH JOKE

STANDARD EXTRUSIONS



Glazing Bar | 2" Rafter Bar | 3" Rafter Bar | 4" Rafter Bar | 6" Rafter Bar | Structural Bar | 4" Structural Bar | 6" Structural Bar

FROM EVERGREEN HOUSE
MON JUL 10