



**Technical Bulletin
Rev. 1/1/07**

Glazing Requirements for Vertical Insulating Units

Vitro America requires that our **vertically glazed insulating glass units** be installed in accordance with the instructions of this Technical Bulletin as part of the terms of our warranty. In addition, the glazing principles set forth in the Insulating Glass Manufacturers' Alliance (IGMA) *Glazing Guidelines for Sealed Insulating Glass Units* and the Glass Association of North America (GANA) *Glazing Manual* should be followed. **All insulating units must be set on setting blocks, the framing system must be weeped to the exterior and centering shims must be used with wet sealants. The insulating unit sealant must be protected from direct exposure to sunlight, except for silicone sealed units glazed in a structural silicone glazing system.** The framing system must have a maximum deflection of $L / 175$. The glazing pocket on wood windows or doors must be painted, stained or sealed and be completely dry and cured before glazing Vitro insulating units. Please refer to an actual copy of the warranty for further glazing requirements. These requirements apply to all types of framing system materials: aluminum, steel, wood, vinyl or fiberglass. **Dual silicone sealed insulating glass units are required for structural silicone glazing systems. The glazier must order "silicone sealed insulating units" when they are required.**

Copies of the IGMA booklet *Glazing Guidelines for Sealed Insulating Glass Units* TM-3000 (97) are available from:

Insulating Glass Manufacturers Alliance
1500 Bank Street, Suite 300
Ottawa, ON K1H 1B8
Canada

Copies of the GANA *Glazing Manual* are available from:

Glass Association of North America
3310 Harrison Street
Topeka, KS 66611

Please note that Vitro America **does not warrant glass against breakage from any cause.** Vitro America's warranty on insulating units covers seal failure only. Vitro America will assist our customers in determining the potential for thermal stress or windload breakage, but glass breakage must be handled as a matter of statistical probability.



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Warranty Requirements for Vertically Glazed Insulating Units

Maximum Unit Size: 84 X 144
not to exceed 60 square feet for CFP units
not to exceed 50 square feet for non-CFP units

	<u>Max. Area</u>
Any Spacer, 2.5 mm glass	12 Sq. Ft.
3/16", 1/4" Spacer, 3.0 mm thru 6.0 mm glass	20 Sq. Ft.
5/16", 3/8" Spacer, 3.0 mm glass	20 Sq. Ft.
4.0 mm thru 6.0 mm glass	35 Sq. Ft.
7/16" to 3/4" Spacer, 3.0 mm glass	20 Sq. Ft.
4.0 mm and 5.0 mm glass	35 Sq. Ft.
6.0 mm glass	50 Sq. Ft. (non-CFP units) 60 Sq. Ft. (CFP units)

Weep Holes

Three weep holes must be provided for each insulating unit. Each weep hole must be equal in area to a 3/8" diameter hole. One weep hole must be located between the setting blocks and the other two weep holes must be located between the setting blocks and the adjacent mullions. Alternative weep systems must be approved in advance.

Setting Blocks

Setting blocks must be located at the ¼ points of the insulating unit. Setting blocks must be at least as wide as the insulating unit, at least as high as the minimum edge clearance and 0.1" in length for each square foot of glass area with a minimum length of 4" (2" for ½" units made with 2.5 mm or 3.0 mm glass and having an area of less than 12 sq. ft.). Setting blocks must be made of a resilient material such as neoprene, santoprene, EPDM or extruded silicone. Setting blocks must be 80 - 90 Durometer, Shore A, in hardness, and meet the requirements of ASTM C 864 *Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks and Spacers*.

Shims

Resilient shims made of a material such as neoprene, santoprene, EPDM or extruded silicone that have a hardness of 40 - 60 Durometer, Shore A, must be used with gunnable sealants or butyl tapes. Dry glazed systems will be deemed suitable if glazed with neoprene, santoprene, EPDM or extruded silicone glazing gaskets supplied by the system manufacturer.

Sealants

Compatibility testing must be done by the supplier of the waterproofing sealant. The sealant must be certified compatible with the insulating unit sealant for the



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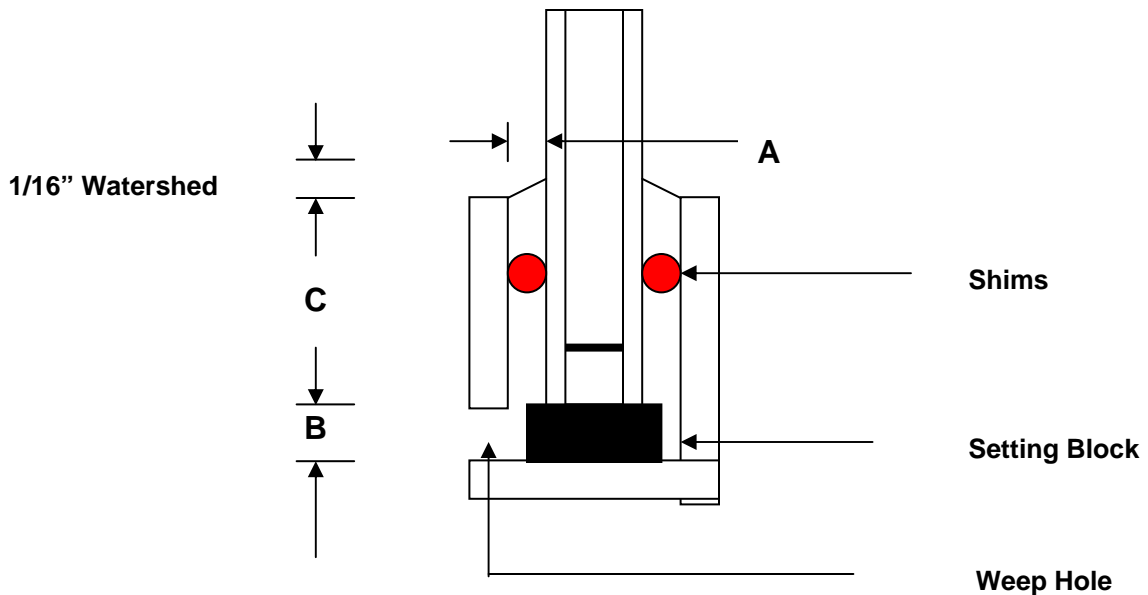
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units being glazed (contact the production center to find out what sealant is being used). A signed letter from the waterproofing sealant manufacturer should be kept in the job file to confirm sealant compatibility.

Glazing Pocket Clearance

Unit Type	<u>Minimum Clearance</u>		
	A = Face	B = Edge	C = Bite
3/16" – 1/4" Air Space, 2.5 - 4.0 mm glass	1/8"	1/8"	1/2"
All other combinations	3/16"	1/4"	1/2"

Required Glass Bite and Edge and Face Clearances for Vertical Insulating Glass Units



- A = Face Clearance**
- B = Edge Clearance**
- C = Bite**



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