



**WDMA / AAMA / CSA JOINT TECHNICAL INTERPRETATION
REQUEST**

INTERPRETATION NUMBER 05-01
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Approved 10/06

DATE OF INQUIRY: May 11, 2005

PERTINENT JOINT WDMA/AAMA/CSA SPECIFICATION(S):

AAMA/WDMA/CSA 101/I.S.2/A440-05, "Standard/Specification for windows, doors, and unit skylights"

SECTION(S) IN QUESTION:

AAMA/WDMA/CSA 101/I.S.2/A440-05 clause 5.3.6.6.7 *"The glazed operable sash shall be opened to a 45° position or to the limit of its travel, whichever is less, and one side blocked in that position to prevent movement in a closing direction. The blocking shall extend no farther inward than 100 mm (4 in), as shown in Figure 23.*

A pre-load force of 15 N (3 lbf) shall be applied for a period of 10 seconds to the midpoint of the sash member opposite the hinges, in a closing direction and perpendicular to the plane of the frame. The load shall then be removed and the deflection-measuring devices shall be zeroed. The force shall then be increased to the full test load. The deflection of the outer corner of the operable lite on the opposite side from the blocking, in the direction of the applied force, shall be measured at 60 ± 5 seconds after the full force has been applied and while it is still being applied. The deflection measured to the nearest 0.25 mm (0.01 in) shall not exceed the values indicated in Table 17."

Sash type	Performance class	Load, N (lbf)	Deflection limit, mm (in)*
Awning, hopper, projected	R and LC	70 (15)	Reported
Awning, hopper, projected	C	140 (30)	3.8•A (0.14•B)

*A is the area of the tested sash in square meters; B is the area of the tested sash in square feet.

INTERPRETATION REQUESTED:

1. If the window has an operator, can the test be done with the operator attached?
2. Also should 3.8 x A (0.14 x B) actually be 38.0 x A (0.14 x B)?

SUGGESTED INTERPRETATION:

1. Yes. This test shall be conducted with the test sample in its designed, end-use condition. There is nothing in the language of Clause 5.3.6.6.7 that directs or suggests that any hardware should be disconnected.

2. Yes. In reviewing Section 2.2.4.5.2 (page 15) of AAMA/NWWDA 101/I.S.2-97, the original equation (in I-P units) is “ $1.50 A / 10.7$ ”, where “A” is the sash area in ft^2 . The SI equivalent to this formula is “ $38.0 \times A$ ”, where “A” is the sash area in m^2 . “ $3.8 \times A$ ” is apparently a typographical error.

REVIEWED/ APPROVED BY:

COMMITTEE	COMMENTS / ACTION	STATUS	DATE
JDMG		Approved	Nov. 20 th , 2006
AAMA		Approved	Oct. 12 th , 2006
CSA		Approved	Aug. 9 th , 2006
WDMA		Approved	Jan. 18 th , 2006