FOREWORD

Draft Addendum 90.1ag – Publication Draft. When Standard 90.1-1999 was developed, an extensive default table was included for glazed wall systems (e.g. site-built curtainwalls) because NFRC was still developing the certification program for these products. NFRC now has a certification program in place for site-built fenestration. Consequently, compliance should be demonstrated based on the rating for a specific product.

Addendum 90.1ag

SECTIONS 5.2.2.1, 5.2.2.2, A8, TABLE A-17, TABLE A-18, AND TABLE A-19:
(I-P AND SI)

Revise to read as follows -

5.2.2.1 U-Factor. U-factors shall be determined in accordance with NFRC 100. U-factors for skylights shall be determined for a slope of 20º above the horizontal. U-factor shall be determined by a laboratory accredited by a nationally recognized accreditation organization, such as the National Fenestration Rating Council, and shall be labeled and certified by the manufacturer.

Exceptions to 5.2.2.1:

(a) U-factors from A.8.1 shall be an acceptable alternate for determining compliance with the U-factor criteria for skylights. Where credit is being taken for a low-emissivity coating, the emissivity of the coating shall be determined in accordance with NFRC 301. Emissivity shall be verified and certified by the manufacturer.
(b) U-factors from A.8.2 shall be an acceptable alternate for determining compliance with the U-factor criteria for vertical fenestration.
(c) U-factors from A.7 shall be an acceptable alternate for determining compliance with the U-factor criteria for opaque doors.
(d) For garage doors, NAGDM 105 shall be an acceptable alternate for determining U-factors.

5.2.2.2 Solar Heat Gain Coefficient. Solar heat gain coefficient (SHGC) for the overall fenestration area shall be determined in accordance with NFRC 200. Solar heat gain coefficient shall be determined by a laboratory accredited by a nationally recognized accreditation organization, such as the National Fenestration Rating Council, and shall be labeled and certified by the manufacturer.

Exceptions to 5.2.2.2:

(a) Shading coefficient of the center of glass multiplied by 0.86 shall be an acceptable alternate for determining compliance with the SHGC requirements for the overall fenestration area. Shading coefficient shall be determined using a spectral data file determined in accordance with NFRC 300. Shading coefficient shall be verified and certified by the manufacturer.
(b) Solar heat gain coefficient of the center of glass shall be an acceptable alternate for determining compliance with the SHGC requirements for the overall fenestration area. SHGC shall be determined using a spectral data file determined in accordance with NFRC 300. SHGC shall be verified and certified by the manufacturer.
(c) SHGC from A.8.1 shall be an acceptable alternate for determining compliance with the SHGC criteria for skylights. Where credit is being taken for a low-emissivity coating, the emissivity of the coating shall be determined in accordance with NFRC 301. Emissivity shall be verified and certified by the manufacturer.

(d) SHGC from A.8.2 shall be an acceptable alternate for determining compliance with the SHGC criteria for vertical fenestration.

**A8 Fenestration.** All fenestration with U-factors, SHGC, or visible light transmittance determined, certified, and labeled in accordance with NFRC 100, 200, and 300 respectively, as specified in 5.2.2, shall be assigned those values.

**A8.1 Unlabeled Skylights.** Unlabeled skylights shall be assigned the U-factors in Table A-17 and are allowed to use the SHGCs and visible light transmittances in Table A-18. The metal with thermal break frame category shall not be used unless all frame members have a thermal break equal to or greater than ¼ in. (6 mm).

**A8.2 Unlabeled Vertical Fenestration.** Unlabeled vertical fenestration, both operable and fixed, shall be assigned the U-factors, SHGCs, and visible light transmittances in Table A-19. No credit shall be given for any other features, including metal frames with thermal breaks, low-emissivity coatings, gas-fillings, or insulating spacers, other than as determined in accordance with 5.2.2.

**Table A-17 (Section A8.1), Assembly U-Factors for Unlabeled Skylights**

Delete the heading and four columns for vertical installation.

**Table A-18 (Section A8.1 Assembly Solar Heat Gain Coefficients (SHGC) and Assembly Visible Light Transmittances (VLT) for Unlabeled Skylights**

Revise the column heading to delete reference to unlabeled glazed wall systems:

Unlabeled Skylights (includes all: glass/plastic, flat/domed, fixed/operable)

**Table A-19 (Section A8.2) Assembly U-Factors, Assembly Solar Heat Gain Coefficients (SHGC) and Assembly Visible Light Transmittances (VLT) for Unlabeled Vertical Fenestration**

Revise the column heading to read as follows:

Unlabeled Vertical Fenestration