High Velocity Hurricane Zone Heavy Weather / High Security Brochure

Tufflite Polycarbonate HWHS for the HVHZ





2 Tufflite Polycarbonate Heavy Weather / High Security (HWHS) HWHS High Velocity Hurricane Zone (HVHZ)

Product Specification

Tufflite skylight shall be model No. HWHS as manufactured by Kingspan Light + Air, Santa Ana, CA. Skylight shall be fully factory assembled consisting of a polycarbonate dome with a CC-1 classification that is sealed by interior and exterior gaskets to a 6063-T5 heliarc welded aluminum frame. The frame is to have an integral condensation channel to carry moisture to the exterior. The vertical aluminum retaining cap fasteners are to be stainless steel #10-14 x 1" Ig. hex head self drilling screws with neoprene washers at 6" centers. The horizontal aluminum retaining cap fasteners are to be stainless steel #10 x 3/8" Ig. hex head sheet metal screws at 6" centers. Curb fasteners, by others, attached at 9" centers. The skylight shall be installed either on a curb furnished by others or on its own 6", 9" or 12" high self flashing curb fabricated from aluminum with a 2-3/4" roof nailing flange.

Performance Testing and Approvals

Kingspan Light + Air skylights meet specific envelope performance criteria and requirements stipulated by US building codes. Tufflite Polycarbonate HWHS skylights are tested in accordance with ASTM, UL, FM and other approval standards, testing methods and procedures.



10 Year Hail Rated Warranty

For a period of ten (10) years from the date of purchase, Kingspan Light + Air warrants that Tufflite Polycarbonate HWHS skylights will be free from defects in material and workmanship and that no water will leak through the commercial curb top or self flashed skylight. This warranty also includes coverage against documented 2" hail stones or smaller as well as cracking or crazing of polycarbonate dome material that would result in a water leak. Exceptions apply, see 10 year warranty document.

Product Test Data

Test / Approval	Result
Anti-Terrorism (DoD Blast Resistant)	High; UFC 4-010-01
Anti-Terrorism (ASTM F1642 Hazard Rating)	No break
Anti-Terrorism (GSA TS01 Performance Condition)	#1 No hazard
ASTM D1003	Meets performance requirements
ASTM E330	Meets performance requirements
ASTM E1886	Meets performance requirements
ASTM E1996	Meets performance requirements
FM Global	Tufflite passed 4431 2" severe hail test
Hurricane Conformance (Metro Dade County)	Meets and exceeds standard requirements (NOA# 15-0601.08)
Hurricane Conformance (Florida Building Code)	Meets and exceeds code requirements (FL14006)
IECC 2015	Meets without controls climate zone 1, meets with controls climate zones 2-8
NFRC 100-2014 (U-Factor)	Certified
NFRC 200-2014 (Solar Heat Gain Coefficient)	Certified
OSHA	Meets CFR fall regulations
Underwriters Laboratories (UL)	Passed class 4 hail test (The Highest Rating)





















Self flashing HWHS-SF-2

Curb mounted HWHS-CM-2

Dimensions, Light Transmittance & Thermal Properties

Model Number	Inside Curb Dimensions		Model Number	Inside Curb Dimensions			Model Number	Inside Curb Dimensions			
4848-HWHS	48″	х	48″	4884-HWHS	48″	х	84″				
5555-HWHS	55″	х	55″	4896-HWHS	48″	х	96″				
				6072-HWHS	60″	х	72″				
				6096-HWHS	60″	х	96″				

Solar Heat Gain Coefficient = 0.26; U-Factor = 0.80; Visible Light Transmittance = 60% (Typical for double glazed units)

Options

- 1. Curb mounted (CM) or Self flashing (SF)
- 2. Three polycarbonate colors:
 - a. Bronze (BPC)
 - b. Clear (CPC)
 - c. White (WPC)
- 3. Single dome (1) or Insulating double domes (2)
- 4. Two standard frame finishes*: a. Brown paint (BP)
 - b. Mill finish (MF)

*Custom, or specialized paint available upon request

- 5. Self flashing curb heights*:
 - a. 6″
 - b. 9″
 - c. 12″
 - *Custom heights available upon request
- 6. EPDM curb seal tape (CMT)
- 7. Insulated self flashing curb (INS)
- 8. Wood nailer (WN)
- 9. Aluminum non-welded double wall (DW)
- 10. Aluminum welded double wall (WDW)

Skylight Accessories

- 1. Gladiator
 - a. Structural curbs (SC)
 - b. Security grills (SG)
 - c. Safety screens (SSCRN)
 - d. External safety cages (SCAGE)

Kingspan Light + Air

North America - California Operation

401 E. Goetz Avenue, Santa Ana, California 92707 Toll Free: +1 (800) 854 8618 T: +1 (714) 540 8950 F: +1 (714) 540 5415 E: info@kingspanlightandair.us.com www.kingspanlightandair.us www.bristolite.com www.cpidaylighting.com

For the product offering in other markets please contact your local sales representative or visit www.kingspanlightandair.us

Notes

All Kingspan Light + Air skylights are available with either zinc plated steel or architectural grade 6063-T5 aluminum frames. Frame types include, curb mount, self flashing (curb mount with an integral curb), or curb mount with a separate structural curb. All frames are designed with condensation gutters and non-clog weep holes. Frame options include: AAMA compliant thermal breaks, 1" polyisocyanurate insulation, double wall, wood nailer, louvers, rain guards, and custom outside/inside curb, curb height and flange dimensions. All glazings are available in alternative dome shapes including; bubble, radial triarch, pyramid and double hip except Energy Star Fiberlite.

Performance information obtained by testing glazing materials, dome sets and skylights to NFRC, NAFS, ICC, AAMA, UL, FM, IES and ASTM standards by Kingspan Light + Air, material suppliers and independent third party laboratories.

OSHA compliance and other test results are for specific outer dome thicknesses.

For additional technical information and/or daylighting systems design consultation, contact Kingspan Light + Air for your specific needs. Care has been taken to ensure that the contents of this publication are accurate, but Kingspan Limited and its subsidiary companies do not accept responsibility for errors or for information that is found to be misleading. Suggestions for, or description of, the end use or application of products or methods of working are for information only and Kingspan Limited and its subsidiaries accept no liability in respect thereof.

Kingspan_Tufflite_Polycarbonate_HWHS_Brochure_NA_EN_R3

