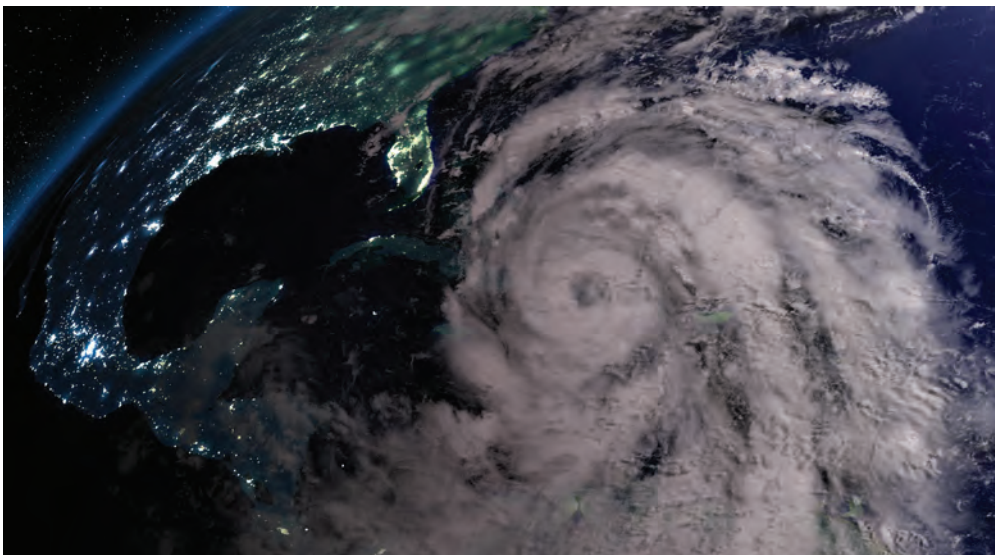




# Tufflite Polycarbonate HWHS Heavy Weather / High Security Brochure

High Velocity Hurricane Zone (HVHZ)



*The new name for*

Bristolite® Daylighting Systems  
harnessing sunlight for energy savings

**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" lg. 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" lg. 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.

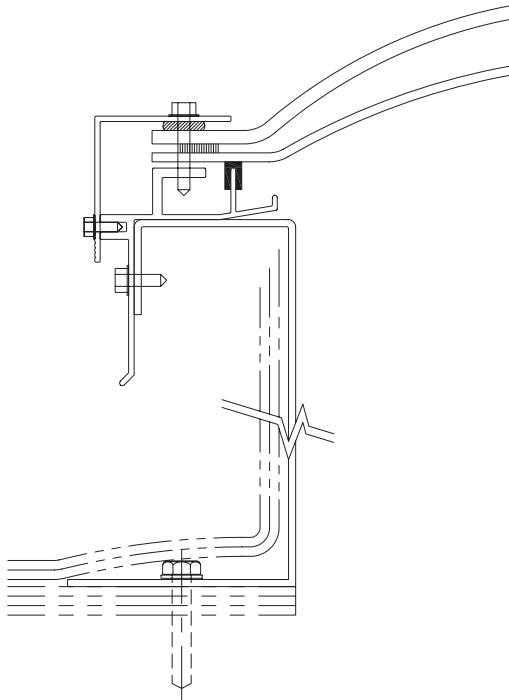
**10 Year Hail Rated Warranty**

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.

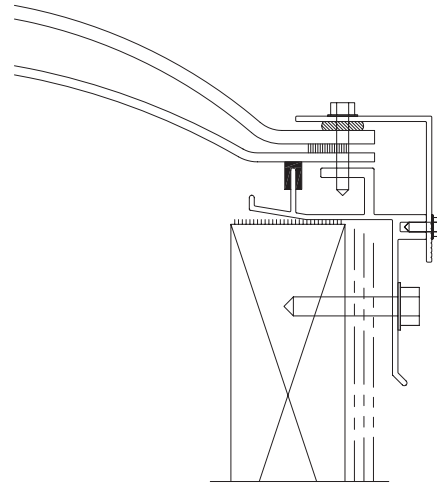
**Product Test Data**

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"	x	48"	4884-HWHS	48"	x	84"				
5555-HWHS	55"	x	55"	4896-HWHS	48"	x	96"				
				6072-HWHS	60"	x	72"				
				6096-HWHS	60"	x	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)

**Options (continued)**

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 - Headquarters  
401 E. Goetz Avenue, Santa Ana, California 92707  
Toll Free: (800) 854-8618  
T: (714) 540-8950  
F: (714) 540-5415  
E: [info@kingspanlightandair.us](mailto:info@kingspanlightandair.us)  
[www.kingspanlightandair.us](http://www.kingspanlightandair.us)  
[www.bristolite.com](http://www.bristolite.com)

---

## Kingspan Light + Air

Texas Operation  
100 Metro Drive, Terrell, Texas 75160  
Toll Free: (800) 854-8618  
T: (972) 210-4083  
E: [info@kingspanlightandair.us](mailto:info@kingspanlightandair.us)  
[www.kingspanlightandair.us](http://www.kingspanlightandair.us)  
[www.bristolite.com](http://www.bristolite.com)

---

## Kingspan Light + Air

Georgia Operation  
1180 Hayes Industrial Drive, Marietta, Georgia 30062  
Toll Free: (800) 854-8618  
T: (770) 514-8085  
E: [info@kingspanlightandair.us](mailto:info@kingspanlightandair.us)  
[www.kingspanlightandair.us](http://www.kingspanlightandair.us)  
[www.bristolite.com](http://www.bristolite.com)

For the product offering in other markets please contact your local sales representative or visit [www.kingspanlightandair.us](http://www.kingspanlightandair.us)

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\_R1



The new name for  
Bristolite® Daylighting Systems  
harnessing sunlight for energy savings