



## Em-Dome® Modular Technical Note



# em-dome®

### Specific Features

- CE marked according to EN1877:2005
- Fully certified to EN1873:1200 Joules & ACR(M):0012005 Class B
- Can incorporate ventilation in the curb and also be opening
- Polycarbonate Em-Domes® are certified non-fragile
- Available as square, rectangular or circular
- May be clear or diffused as standard with heat reflect options available
- May be domed or trapezoidal
- Available with PVC upstand or direct



## Product Description

Em-Dome® modular rooflights are primarily designed for introducing daylight into schools, hospitals, offices and other buildings. They are available as square, rectangular or circular. Em-Dome® modular rooflights may be glazed in single, double, triple, quad, ECO10 and ECO16 polycarbonate. Glazing types include diffused, clear or heat reflect as the most common types. A domed profile is available for all the manufactured sizes and a large proportion of these are also available as pyramidal rooflights. Ventilation can be achieved either via fixed vents installed in the upstand or opening manually or electrically. A wide range of upstands are available to accommodate roof insulation or an adaptor may be installed to builder's upstands. A large range of accessories are also available including, operating rods, control panels, rain sensors, thermostats and remote control.

## Technical Data

### Thermal Transmission

Values below are calculated U-Values unless denoted otherwise. Complete unit U- Values are available on request.

Typical Values	U-Value (W/m <sup>2</sup> K)
Single Glazed	5.36
Double Glazed	2.68
Triple Glazed	1.78
Quad Glazed	1.24
ECO10	1.23
ECO16	0.85

### Performance of glazing materials

Typical Values	Polycarbonate
Fire Ratings	

To BS 476: Part 3	AA
To BS 476: Part 3	Class 1
To 1991 Building Regulations	Tp(a)

-----  
 Service temperature -50 to +120°C

### Certification

Air permeability to EN1873	A4
Watertightness to EN1873	Pass
Impact test to EN1873	1200/J

Impact test to ACR (M) 001:2005 Class B

**Standard Size Chart** (There are other sizes available on request)

Vertical Upstand

Size Ref No	Daylight Size		Roof Opening Size	
	Length (mm)	Width (mm)	Length (mm)	Width (mm)
S1	400	400	400	400
S2	500	500	500	500
S3	550	550	550	550
S4	600	600	600	600
S5	800	800	800	800
S6	750	750	750	750
S7	800	800	800	800
S8	900	900	900	900
S9	1000	1000	1000	1000
S10	1050	1050	1050	1050
S10A	1100	1100	1100	1100
S11	1200	1200	1200	1200
S12	1300	1300	1300	1300
S13	1400	1400	1400	1400
S15A	1700	1700	1700	1700
R3	400	700	400	700
R3A	400	1000	400	1000
R4	500	800	500	800
R4A	500	1100	500	1100
R4B	500	1700	500	1700
R5	600	900	600	900
R6	600	1200	600	1200
R7	700	1000	700	1000
R7A	700	1300	700	1300
R7B	700	1600	700	1600
R10A	800	1100	800	1100
R11	800	1300	800	1300
R11A	800	1700	800	1700
R16	900	1200	900	1200
R16A	900	1500	900	1500
R17	1000	1300	1000	1300
R17A	1000	1500	1000	1500
R18	1000	1600	1000	1600
R20	1000	2200	1000	2200
R22B	1100	1700	1100	1700
R22C	1100	2300	1100	2300

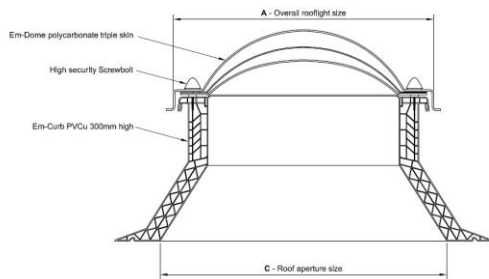
Splayed Upstand

Size Ref No	Daylight Size		Roof Opening Size	
	Length (mm)	Width (mm)	Length (mm)	Width (mm)
S1	400	400	600	600
S2	500	500	700	700
S3	550	550	750	750
S4	600	600	800	800
S5	700	700	900	900
S6	750	750	950	950
S7	800	800	1000	1000
S8	900	900	1100	1100
S9	1000	1000	1200	1200
S10	1050	1050	1250	1250
S10A	1100	1100	1300	1300
S11	1200	1200	1400	1400
S12	1300	1300	1500	1500
S13	1400	1400	1600	1600
S15A	1700	1700	1900	1900
R3	400	700	600	900
R3A	400	1000	600	1200
R4	500	800	700	1000
R4A	500	1100	700	1300
R4B	500	1700	700	1900
R5	600	900	800	1100
R6	600	1200	800	1400
R7	700	1000	900	1200
R7A	700	1300	900	1500
R7B	700	1600	900	1800
R10A	800	1100	1000	1300
R11	800	1300	1000	1500
R11A	800	1700	1000	1900
R16	900	1200	1100	1400
R16A	900	1500	1100	1700
R17	1000	1300	1200	1500
R17A	1000	1500	1200	1700
R18	1000	1600	1200	1800
R20	1000	2200	1200	2400
R22B	1100	1700	1300	1900
R22C	1100	2300	1300	2500
C1	400dia		650dia	
C2	500dia		750dia	
C3	600dia		850dia	
C4	700dia		950dia	

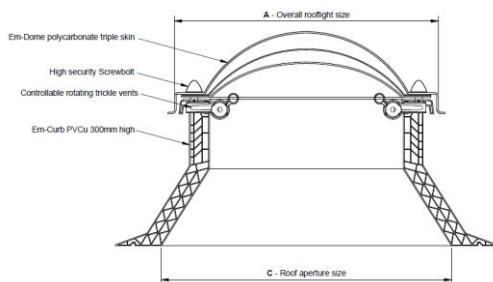
C5	800dia		1050dia	
C6	900dia		1150dia	
C7	1000dia		1250dia	
C8	1100dia		1350dia	

## Common Permutations

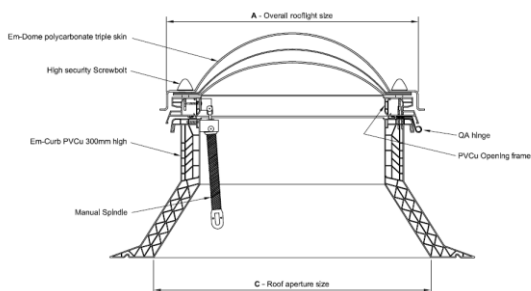
Triple Skin Fixed Em-Dome®, comes with PVC300mm Splayed Em-Curb®



Triple Skin Fixed Em-Dome®, comes with PVC300mm Splayed Em-Curb® & Rotary Trickle Vents



Triple Skin Fixed Em-Dome®, comes with PVC300mm Splayed Em-Curb®, Manually Opening



Triple Skin Fixed Em-Dome®, comes with PVC300mm Splayed Em-Curb®, Electrically Opening

