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# **BRITISH BOARD OF AGRÉMENT TEST REPORT No 58669**

### **SOLATUBE INTERNATIONAL INC - SOLATUBE SKYLIGHTS**

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Date: 26 September 2016

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Date: 03 October 2016

On behalf of the British Board of Agrément

Client: Solatube International, Inc

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Requested by: Luke Adams - BBA

**Job No:** T9 58669 (S2 58189)

Work Period: August to September 2016

#### 1 REPORT CONDITIONS

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# 2 RESISTANCE TO UPWARD LOADS

### 2.1 Method

In accordance with BS EN 1873: 2014 +A1: 2016 Prefabricated accessories for roofing – Individual rooflights of plastic – Product specification and test methods, Section 5.4.1 Resistance to upward loads.

The assessment is of the rooflight and its flashing/curb, it does not cover the attachment of the flashing/curb to the structure of the building.

Air pressure was used to apply the load.

### 2.2 Samples

BBA Ref/Lot	Quantity	Description
S2/58189/1	2	Solatube 290DS kit with acrylic dome kits, labelled as 2 of 290DS starter kits 121595.
S2/58189/2	2	Solatube tile roof flashing kits (290DS), labelled 5 of 290DS flashing 230880.
S2/58189/4	5	Solatube 750DS Acrylic dome kits, labelled 5 of 750DS dome acrylic bulk 510300.
S2/58189/5	3	Solatube sky vault M74DS-D polycarbonate dome kit, labelled 3 of M74DS Dual dome 126000.
S2/58189/6	5	Solatube 330/750DS tube rings, labelled 400500.
S2/58189/7	3	Solatube curb mount flashing 330DS.
S2/58189/8	5	(330/750) 21" PVC Dome ring, 400500.
S2/58189/11	3	330/750 no pitch flashing.

### 2.3 Results

Lot	Maximum load applied (N·m <sup>-2</sup> )	Observation	Class
1 & 2	3352	No visible damage.	UL3352
4 & 11 (6 & 8)	3352	No visible damage.	UL3352
4 & 7 (6 & 8)	3352	No visible damage.	UL3352
5 & 7	3352	No visible damage	UL3352

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# 3 RESISTANCE TO DOWNWARD LOADS

### 3.1 Method

In accordance with BS EN 1873: 2014 +A1: 2016 Prefabricated accessories for roofing – Individual rooflights of plastic – Product specification and test methods, Section 5.4.2 Resistance to downward loads.

The assessment is of the rooflight and its flashing/curb, it does not cover the attachment of the flashing/curb to the structure of the building.

Weights were used to apply the load.

### 3.2 Samples

BBA Ref/Lot	Quantity	Description
S2/58189/1	2	Solatube 290DS kit with acrylic dome kits, labelled as 2 of 290DS starter kits 121595.
S2/58189/2	2	Solatube tile roof flashing kits (290DS), labelled 5 of 290DS flashing 230880.
S2/58189/4	5	Solatube 750DS Acrylic dome kits, labelled 5 of 750DS dome acrylic bulk 510300.
S2/58189/5	3	Solatube sky vault M74DS-D polycarbonate dome kit, labelled 3 of M74DS Dual dome 126000.
S2/58189/6	5	Solatube 330/750DS tube rings, labelled 400500.
S2/58189/7	3	Solatube curb mount flashing 330DS.
S2/58189/8	5	(330/750) 21" PVC Dome ring, 400500.
S2/58189/11	3	330/750 no pitch flashing.

### 3.3 Results

Lot	Maximum load applied (N⋅m⁻²)	Observation	Class
1 & 2	7182	No visible damage.	DL7182
4 & 11 (6 & 8)	7182	No visible damage.	DL7182
4 & 7 (6 & 8)	7182	No visible damage.	DL7182
5 & 7	7182	No visible damage	DL7182

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### 4 IMPACT RESISTANCE, LARGE SOFT BODY

### 4.1 Method

In accordance with BS EN 1873: 2014 +A1: 2016 Prefabricated accessories for roofing – Individual rooflights of plastic – Product specification and test methods, Section 5.4.3.2 Large, soft body impact.

The assessment is of the rooflight and its flashing/curb, it does not cover the attachment of the flashing/curb to the structure of the building.

## 4.2 Samples

BBA Ref/Lot	Quantity	Description
S2/58189/3	1	Solatube 330DS Polycarbonate dome kit.
S2/58189/4	5	Solatube 750DS Acrylic dome kits, labelled 5 of 750DS dome acrylic bulk 510300.
S2/58189/5	3	Solatube sky vault M74DS-D polycarbonate dome kit, labelled 3 of M74DS Dual dome 126000.
S2/58189/6	5	Solatube 330/750DS tube rings, labelled 400500.
S2/58189/7	3	Solatube curb mount flashing 330DS.
S2/58189/8	5	(330/750) 21" PVC Dome ring, 400500.
S2/58189/11	3	330/750 no pitch flashing.

### 4.3 Results

Lot	Impact site	Drop height <sup>(1)</sup> (m)	Observation	Class
4 & 11 (6 & 8)	Centre	2.75	No visible damage	SB1350
3 & 7 (6 & 8)	Centre	2.75	No visible damage	SB1350
5 & 7	Centre	2.75	No visible damage	SB1350

<sup>(1)</sup> Due to limitations on the test equipment used this was the maximum drop height achieved.

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