

## Technical Data Sheet Guardian R45 Standard Tube

### Product Use:

The R45 Standard Tube is a 45mm diameter un-barbed plastic telescopic tube for use with the appropriate Guardian screw fasteners, used for securing of membrane in the overlap. Designed to eliminate the effects of cold bridging within the roof.

### Description:

- Modified PP.
- 45mm diameter integral washer.
- Hole diameter 6.1mm.
- ETA Approval 08/0285.
- FM Approval No. 3034551.

### Technical Specification:

Code	Description
19-R-45-020	45x20mm Guardian R Standard Tube
19-R-45-040	45x40mm Guardian R Standard Tube
19-R-45-060	45x60mm Guardian R Standard Tube
19-R-45-080	45x80mm Guardian R Standard Tube
19-R-45-090	45x90mm Guardian R Standard Tube
19-R-45-100	45x100mm Guardian R Standard Tube
19-R-45-120	45x120mm Guardian R Standard Tube
19-R-45-150	45x150mm Guardian R Standard Tube
19-R-45-180	45x180mm Guardian R Standard Tube
19-R-45-210	45x210mm Guardian R Standard Tube
19-R-45-240	45x240mm Guardian R Standard Tube
19-R-45-270	45x270mm Guardian R Standard Tube
19-R-45-300	45x300mm Guardian R Standard Tube
19-R-45-330	45x330mm Guardian R Standard Tube



Product in the above picture: R-45 120mm (19-R-45-120)

### How to identify the length & tube type:

- Large number in the centre identifies the hole diameter of the tube and will read either 5.2 (plus series) or 6.1 (standard series)
- Small numbers surrounding the circle represent the various tube lengths.
- Whichever number the arrow points to in the circle represents the length of the tube.

### Certification:



### Fasteners:

The Plastic tubes in the R Standard Series can be combined with the following fasteners from the Guardian Range:

- BS 4.8mm & BS 6.1mm.
- PS 4.8mm.
- KPWS 5.2mm.
- KPNS Nail.
- CS 6.1mm.



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### Combination Table:

TYPE OF FASTENER		STEEL DECK (BUILD-UP + 20MM)	CONCRETE (BUILD-UP + 25MM)		WOOD (BUILD-UP + 25MM)
BUILD-UP	TUBE LENGTH	BS / PS	CS	KPNS	KPWS
40	20	60	70	65	65
50	20	70	80	75	75
60	40	60	70	65	65
70	40	70	60	75	75
80	60	60	70	65	65
90	60	70	80	75	75
100	80	60	70	65	65
110	90	60	70	65	65
120	100	60	70	65	65
130	100	70	80	75	75
140	120	60	70	65	65
150	120	70	80	75	75
160	120	80	90	85	85
170	150	60	70	65	65
180	150	70	80	75	75
190	150	80	90	85	85
200	180	60	70	65	65
210	180	70	80	75	75
220	180	80	90	85	85
230	210	60	70	65	65
240	210	70	80	75	75
250	210	80	90	85	85
260	240	60	70	65	65
270	240	70	80	75	75
280	240	80	90	85	85
290	270	60	70	65	65
300	270	70	80	75	75
310	270	80	90	85	85
320	300	60	70	65	65
330	300	70	80	75	75
340	300	80	90	85	85
350	330	60	70	65	65
360	330	70	80	75	75
370	330	80	90	85	85
380	330	90	100	95	95
390	330	100	120	105	105
400	330	110	120	115	120
410	330	120	140	125	120
420	330	130	140	--	--
430	330	140	160	--	--
440	330	150	160	--	--
450	330	160	180	--	--
460	330	170	180	--	--
470	330	180	200	--	--
480	330	200	200	--	--
490	330	200	220	--	--
500	330	220	220	--	--

All sizes in mm



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### **Installation:**

In order to ensure the correct application of the tube & fastener combination into the substrate and to avoid overdriving and/or damage, all sleeves and fasteners must be installed using only the recommended tooling, including screw guns (with torque setting), drive bars and correct bits etc.

A project specific wind uplift calculation should be carried out to ensure the correct density of fasteners is installed. Pull-out testing should also be undertaken for concrete decks and all refurbishment projects. This will ensure the suitability of the fastener and additionally will determine the optimum drill diameter and embedment required.