

MECHANICAL FASTENERS FOR ATTACHMENT OF INSULATION AND MEMBRANES

WHAT ARE SPRA COMPONENT QUALITY STANDARDS?

SPRA Component Quality Standards set a benchmark of performance for products used in single ply membrane systems. They are a vital aid to specification and define the minimum technical standard for membership of the Association. All SPRA CQS are available by download from www.spra.co.uk

PRODUCT DESCRIPTION

Fastener & pressure plate or thermally broken tube fasteners for attachment of insulation & single ply membranes.

TYPICAL APPLICATIONS

Warm and cold roof systems in new construction and refurbishment.

EUROPEAN STANDARDS AND TECHNICAL SPECIFICATIONS	
BSEN Harmonised Product Specification	None
Guideline for European Technical Approval (ETAG)	006 'Systems of mechanically fastened flexible roof waterproofing membranes' See note 1

REQUIREMENTS			
Product characteristic	Symbol	Test Method	Requirements
MECHANICAL PERFORMANCE			
Unwinding – metal decks	–	ETAG 006	See note 2
After 500 cycles: rotation of head	–	ETAG 006	≤1/4 turn
After 900 cycles: rotation of head	–	ETAG 006	≤1/2 turn
After 900 cycles: calculated vertical displacement	–	ETAG 006	≤1 mm per fastener turn
Mechanical resistance/brittleness of plastic tube fasteners	–	EN12691 ETAG 006	At a drop height ≥1,0 m fastener does not break
Impact resistance after heat ageing of plastic tube fasteners	–	EN12691 ISO 179-1	Minimum of less than 20% deviation from original
Design load per fastener (steel deck). See note 3	–	ETAG 006	Minimum 0.4kN
RESISTANCE TO CORROSION			
Carbon steel with a protective coating.	–	DIN50018 ISO 6988:1985	Minimum 15 cycles ≤ 15% corrosion
Stainless steel	–	EN10088-1 BS5427:1996	See note 4
THERMAL PERFORMANCE			
Fastener thermal conductivity	λ	EN ISO 10211-1	≤ 1 W/mK
1. Products that have attained a European Technical Approval (ETA) and have been CE marked will by definition have met the product characteristic and corrosion requirements listed above. 2. In accordance with ETAG 006, Annex D, D. 2.2.1, Test method, the test is not necessary for kits where the unwinding susceptibility of the fastener is known - based on existing test and/or field experience. 3. The design load per fastener should be agreed by the membrane manufacturer and should incorporate the appropriate factor of safety. Where a product has been CE Marked, the relevant product characteristic value in conjunction with the appropriate factor of safety can be used. 4. Fasteners comprising corrosion resistant austenitic stainless steel in accordance with EN 10088-1 are not required to be subjected to the ISO 6988:1985 determination of corrosive behaviour test. (ETAG 006, Annex D, D.3.1.1 test page 74).			

SPRA ASSOCIATE MEMBERS

AFAST (www.fixfast.co.uk) e: jonathan.brown@fixfast.co.uk
 EJOT UK Ltd. (www.ejot.co.uk) e: K.Rackley@ejot.co.uk
 OMG (www.omgroofing.com) e: LSpirig@olyfast.com
 RAWLPLUG (www.rawlplug.co.uk) e: ross.fraser@rawlplug.co.uk
 SFS Intec Ltd. (www.sfsintec.biz) e: uk.leeds@sfsintec.biz
 VRF Europe UK Division (www.vrf.eu/) e: tim.wood@vrf.eu

The following company is also compliant with SPRA Bylaws and technical requirements:
 Fixfast (www.fixfast.co.uk) e: jonathan.brown@fixfast.co.uk