## Info Sheet European Technical Assessment for ZinCo Green Roof Systems!

As early as May 2008, ZinCo made an application through the DIBt suggesting that the EOTA (European Organisation for Technical Approval based in Brussels) create a programme for testing green roof systems. Once this application was granted and a panel of experts had met on a number of occasions, the EOTA published a CUAP (Common Understanding of Assessment Procedures) in May 2011 which listed the assessment criteria for "Kits for Green Roofs". This provided the pre-conditions that would enable the most varied type of

green roof systems to receive European Technical Approval.

ZinCo immediately applied to the DIBt for approval for system build-ups for both extensive green roofs and for simple intensive and intensive green roofs. The ETA was issued in June 2013 with the number 13/0668. It includes a considerable number of our proven system build-ups and now allows us to affix the CE mark to those materials required for the production of these systems. This is, on the one hand, a requirement for unimpeded access to the European



market and its Member States. On the other hand it provides planners, clients and others working with our products the guarantee that the required certification has been carried out for a given product and that the products are in compliance with the requirements of the approval.

On 22 June 2018, ETA-13/0668 was replaced by a corresponding European Technical Assessment with the same number. It now also includes build-ups with Floradrain FD 60 neo.

## The following 4 system build-up versions have European Technical Assessment:

	Extensive	Extensive	Simple Intensive	Intensive
	Green Roof Type	Green Roof Type	Green Roof Type	Green Roof Type
	<b>"Sedum Carpet"</b>	<b>"Rockery Type Plants"</b>	<b>"Heather with Lavender"</b>	<b>"Roof Garden"</b>
Root Barrier	Root Barrier	Root Barrier	Root Barrier	Root Barrier
(optional)	WSB 100-PO	WSB 100-PO	WSB 100-PO	WSB 100-PO
Protection Mat	Protection Mat TSM 32 Protection Mat SSM 45	Protection Mat TSM 32 Protection Mat SSM 45	Protection Mat SSM 45	Protection Mat ISM 50
Drainage Element	Floradrain® FD 25-E Fixodrain® XD 20	Floradrain <sup>®</sup> FD 25-E	Floradrain® FD 40-E Floradrain® FD 60 neo	Floradrain <sup>®</sup> FD 40-E Floradrain <sup>®</sup> FD 60 neo
Filter Sheet	Filter Sheet SF	Filter Sheet SF	Filter Sheet SF	Filter Sheet SF
Growing Medium	System Substrate	System Substrate	System Substrate	System Substrate "Lawn"
	"Sedum Carpet"	"Rockery Type Plants"	"Heather with Lavender"	System Substrate "Roof Garden"

The number of ETA tested products and systems will be increased step by step.

## Notes:

- The European Technical Assessment is based on an initial assessment of the product and on a factory production control system.
- The above-mentioned products will carry the CE mark in future, generally incorporated into the product label.
- Some products (e.g. drainage channels, Georaster<sup>®</sup>) do not come under the ETA or cannot be suitably tested at the moment and will not have the CE mark in the future. However, you can continue to use these products without restriction!
- At the moment, this ETA refers only to green roof systems for flat roofs and roofs with a low pitch of up to 15°. Higher-pitched and steep-pitched green roofs are currently not part of this ETA. You can continue to use these products without restriction, too!



ZinCo GmbH Lise-Meitner-Strasse 2 · 72622 Nürtingen · Germany Phone +49 7022 6003-0 · Fax +49 7022 6003-100 info@zinco-greenroof.com · www.zinco-greenroof.com

## Info Sheet European Technical Assessment for ZinCo Green Roof Systems!

The system build-ups and products certified according to ETA were undergoing a variety of tests operated by certified inspection authorities, such as:

Root Barrier:	Resistance to root penetration according to EN 13948 and to rhizomes according to appendix 3 of the "FLL Green Roofing Guideline" (2018 edition).		
Protection Mat:	Protection efficiency according to EN ISO 13428, behaviour under point loads according to EN ISO 12236, durability aspects according to EN 13252, Annex B.		
Drainage Element:	Water permeability in the plane according to EN ISO 12958, compression behaviour according to EN ISO 25619, durability according to EN 13252, Annex B.		
Filter Sheet:	Tensile strength, static puncture test, characteristic opening size, water permeability normal to the plane, etc. according to the standards stated in EN 13252.		
Growing Medium:	Particle size distribution, bulk density, pH-value, organic matter content, soluble nutrients content, salt content and electrical conductivity according to the corresponding EN standards; water permeability and maximum water capacity according to the "FLL Green Roofing Guideline" (2018 edition).		
Total System:	The coefficient of discharge /runoff reference value C for the four system build-ups was determined according to the "FLL Green Roofing Guideline" (2018 edition) for a 15 minutes period of heavy rainfall of 300 l/(s x ha). The system build-ups meet the fire protection requirements of BrooF (t1) according to		
	EN 13501-5+A1:2009 (certain regulations have to be observed only with large roof areas (one direction $> 40$ m) or with openings in the roof area).		

Page 2 of 2