



CEN/TS 1187:2012 (test 4) Test report

Reaction to fire tests. Test methods for external fire exposure to roofs - test 4.

Date 01/09/2025
Sponsor Ryno Ltd.
Report No 1677
Issue A

Disclaimer:

- The testing method was performed in accordance with the customer's specifications.
- This report is only valid in its entirety and no part may be used independently.
- Details for the parts being examined were provided by the customer.
- Results are only valid for the specific parts examined and for the date of examination.
- The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.
- The accreditation symbol is only valid for the specific testing methods under accreditation.
- UKAS is not responsible for the results contained in this report.

Issue	Date	Notes
A	01/09/2025	First issue

The test was performed by System Laboratories UK Ltd.
Unit 13, Apex Park, Leighton Road, Leighton Buzzard, LU7 3RE, UK



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Purpose	Test methods for external fire exposure to roofs
Examination standard	CEN/TS 1187:2012
Examination procedure	System Laboratories UK procedure 260
Sponsor	Ryno Ltd.
Sponsor address	Castlepoint, Castle Way, Ellon, AB41 9RG, UK
Manufacturer	Ryno Ltd.
Manufacturer's address	Castlepoint, Castle Way, Ellon, AB41 9RG, UK
Project name	TerraSmart Vitrified Composite Decking System
Testing location	Unit 13, Apex Park, Frasierfields Way, Leighton Buzzard, LU7 3RE, UK
Order number	1677
Project number	626
Testing date	28/07/2025
Report date	01/09/2025
Testing equipment	Radiant Panel [75 - 78], Flame Height Measurer [83], Calibration Table [80], 0° Tub [106], Specimen Holder [82], Height Measurer [79], Lab Jack [84], [Raspberry Pi 5 [85], Thermohygrometer [73]
Sample description	See page 3
Examination results	See page 4
Deviations from testing standard	N/A

Written by

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Approved by

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Laboratory Manager



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Sample description	
Product name	TerraSmart Vitrified Composite Decking System
Construction form	As shown in product description
Mass p. unit area	55 - 65 kg/m ²
Density of core	285 kg/m ³
Thickness	210 mm
Product ID	N/A
Sample ID	N/A
Sample description	TerraSmart Vitrified Composite Decking System installed on DS aluminium Joists on RDA-C adjustable pedestals. The Vitrified Composite Decking System was built on, but not fixed to, a mock roof build up featuring insulaion and a waterproofed plywood deck.

Testing description	
Arrival date	10/07/2025
Conditioning	To BS EN 13238:2010 to constant mass
Sampling date	N/A
Sampling procedure	N/A
Flame retardant	No flame retardant added
Colour	Brazilian Walnut - Composite Decking
Pitch	0°
Joints	No joints
Substrate	TerraSmart Vitrified Composite Decking System installed on DS aluminium Joists on RDA-C adjustable pedestals. The Vitrified Composite Decking System was built on, but not fixed to, a mock roof build up featuring insulaion and a waterproofed plywood deck.
Method of fixing	Loose laid to 18 mm OSB Board

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Results

Stage 1			
Sample 1			
Duration of flaming (s)	Flame Spread (mm)	Penetration of the sample (Y/N)	Glowing of the underside of the sample (Y/N)
0	0	N	N

Stage 2			
Observations	Sample 2	Sample 3	Sample 4
Post Test Room Temp. (°C)	22.5	23.5	26.8
Roof Pitch (°)	0	0	0
Time of Penetration	N/A	N/A	N/A
Melting of Specimen (Y/N)	N	N	N
Molten Droplets or Debris (Y/N)	N	N	N
Time Flaming of Droplets (s)	0	0	0

-End of report-