



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

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

Date 23/07/2025  
Sponsor Ryno Ltd.  
Report No 1657  
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	23/07/2025	First issue

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



<b>Report Number</b>	<b>1657-A</b>
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<b>Purpose</b>	Test methods for external fire exposure to roofs
<b>Examination standard</b>	CEN/TS 1187:2012
<b>Examination procedure</b>	System Laboratories UK procedure 260
<b>Sponsor</b>	Ryno Ltd.
<b>Sponsor address</b>	Castle Point, Castle Way, Ellon, Aberdeenshire, AB41 9RG, UK
<b>Manufacturer</b>	Ryno Ltd.
<b>Manufacturer's address</b>	Castle Point, Castle Way, Ellon, Aberdeenshire, AB41 9RG, UK
<b>Project name</b>	TerraSmart Artificial Grass
<b>Testing location</b>	Unit 13, Apex Park, Frasierfields Way, Leighton Buzzard, LU7 3RE, UK
<b>Order number</b>	1657
<b>Project number</b>	613
<b>Testing date</b>	18/07/2025
<b>Report date</b>	23/07/2025
<b>Testing equipment</b>	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]
<b>Sample description</b>	See page 3
<b>Examination results</b>	See page 4
<b>Deviations from testing standard</b>	N/A

**Written by**

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**Approved by**

Asaf Gitarts

Laboratory Manager



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Sample description	
Product name	TerraSmart Artificial Grass
Construction form	Artificial grass adhered to a baseboard with 10 kg/m <sup>2</sup> of infill sand applied over the grass
Mass p. unit area	40 - 55 kg/m <sup>2</sup>
Density of core	210 kg/m <sup>3</sup>
Thickness	225 mm
Product ID	N/A
Sample ID	N/A
Sample description	TerraSmart Artificial Grass System installed on Baseboard substructure, supported by DS aluminium Joists on RDA-C adjustable pedestals. The Artificial Grass System was built on, but not fixed to, a mock roof build up featuring insulaion and a waterproofed plywood deck.

Testing description	
Arrival date	26/06/2025
Conditioning	To BS EN 13238:2010 to constant mass
Sampling date	N/A
Sampling procedure	N/A
Flame retardant	No flame retardant used
Colour	Green - Artificial Grass
Pitch	0 °
Joints	No joints
Substrate	TerraSmart Artificial Grass System installed on Baseboard substructure, supported by DS aluminium Joists on RDA-C adjustable pedestals. The Artificial Grass 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 OSB substrate

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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 s	N/A	N	N

Stage 2			
Observations	Sample 2	Sample 3	Sample 4
Post Test Room Temp. (°C)	25.7	26	25.9
Roof Pitch (°)	0	0	0
Time of Penetration	N/A	N/A	N/A
Melting of Specimen (Y/N)	Y	Y	Y
Molten Droplets or Debris (Y/N)	N	N	N
Time Flaming of Droplets (s)	N/A	N/A	N/A

-End of report-