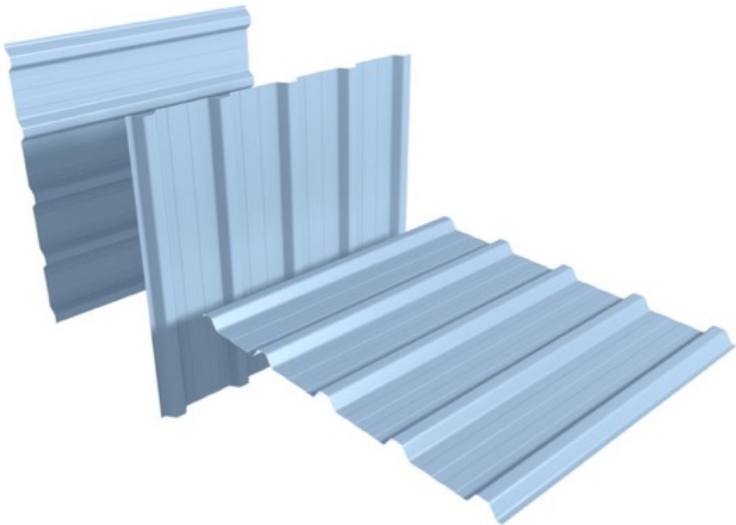
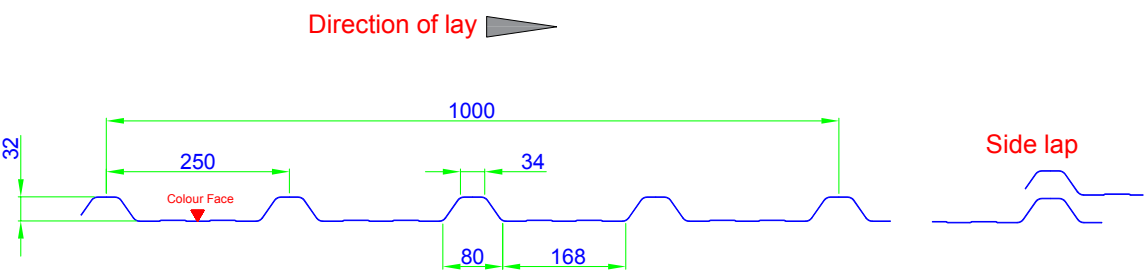


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| Description | |
|--|--|
| Application | Single skin or insulated twin skin roofs and walls. Minimum roof pitch 4°, 6° if rooflights included Walls can be vertically or horizontally laid. |
| Profile depth | 32mm |
| Profile cover width | 1000mm |
| Profile pitch | 250mm |
| Nominal profile weight | 0.5mm = 4.8kg/m ² 0.7mm = 6.7kg/m ² |
| Pack weight | Max 2.0t |
| Lengths | Minimum length 0.20m Maximum length 10.00m |
| Curve options | N/A |
| CE reference | TF32/1000R (Roof profile - Trapezoidal): BS EN 14782:2006 |
|  | |
|  | |
| Materials | <p>Substrate: 0.7mm steel, Class1, S220GD+Z275, AZ150 or ZA255 0.5mm steel, Class1, S220GD+Z275, AZ150 or ZA255</p> <p>Paint finish options: To standard colour charts. Plastisol PVC(P), 200µm Polyester SP, 25µm High Build Polyester HBP, 50µm Colorcoat HPS200 Ultra®, 200µm</p> <p>Other: Enquire with Trimform Products for the availability of aluminium and other paint finishes such as PVdF and Agri-Steel™</p> |

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Installation

TF32/1000 R: outer roof sheet: fixing guide -

Standard fixing positions



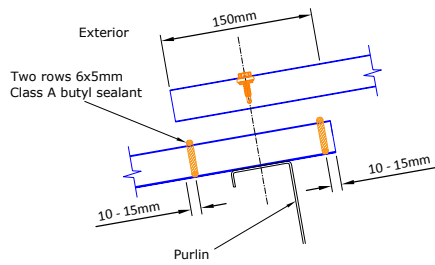
End lap fixing positions



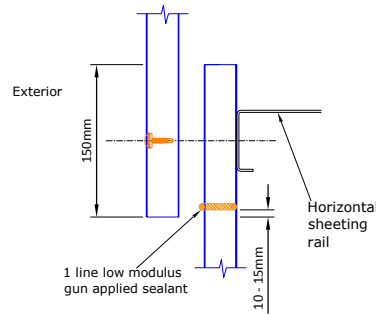
Eaves and ridge fixing positions



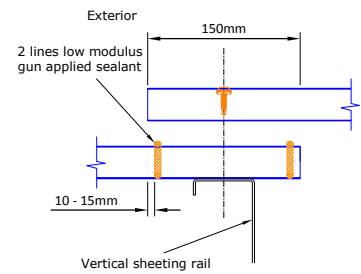
End lap - Roof



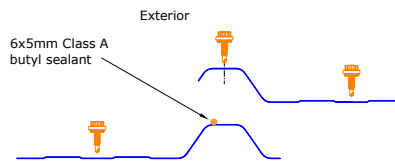
End lap - Vertical wall sheet



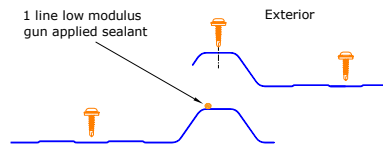
End lap - Horizontal wall sheet



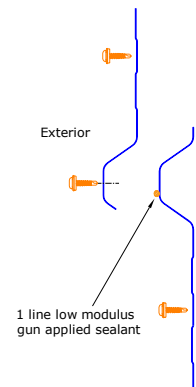
Side lap - Roof



Side lap - Vertical wall sheet



Side lap - Horizontal wall sheet



Laps/Sealants

Roof:

End laps: 150mm, 2 lines 5x6mm butyl sealant
Side laps: one full rib overlap, 1 line 5x6mm butyl sealant

Wall – vertically laid:

End laps: 100mm, 1 line low modulus gun applied sealant.
Side laps: one full rib overlap, 1 line low modulus gun applied sealant.

Wall – horizontally laid:

End laps: 150mm, 2 lines low modulus gun applied sealant.
Side laps: one full rib overlap, 1 line low modulus gun applied sealant.
Sealant strips should be overlapped by 25mm, avoid stretch of sealant at profile corners etc.
Bed filler blocks in sealant to ensure best seal.

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| | |
|---------------------------|--|
| <p>Fastener frequency</p> | <p>Roof: End laps and perimeters (ridge/eaves, penetrations): 4No/m (every trough) central to a 150mm end lap. Edge distance minimum 30mm. Standard (intermediate supports): 4No/m (every trough) Side laps: Stitch at max 450mm centres.</p> <p>Wall – vertically laid: End laps and perimeters (top/bottom of walls, penetrations): 4No/m (every trough) central to a 100mm end lap. Edge distance minimum 30mm. Standard (intermediate supports): 4No/m (every trough) or 3No/m, subject to wind load design. Side laps: When specified, stitch at max 600mm centres.</p> <p>Wall – horizontally laid: End laps and perimeters (top/bottom of walls, penetrations): 4No/m (every trough) central to a 100mm end lap. Edge distance minimum 30mm. Standard (intermediate supports): 4No/m (every trough) or 3No/m, subject to wind load design. Side laps: When specified, stitch at max 600mm centres.</p> |
| <p>Fastener types</p> | <p>Roof: A2 stainless steel or carbon steel 5.5mm Ø, 19mm Ø sealer washer, colour matched head Stitchers: A2 stainless steel or carbon steel 5.5mm or 6.3mm Ø, 16mm Ø sealer washer, colour matched head.</p> <p>Wall: A2 stainless steel or carbon steel 5.5mm Ø, 16mm or 19mm Ø sealer washer, colour matched head Stitchers: A2 stainless steel or carbon steel 5.5mm or 6.3mm Ø, 16mm Ø sealer washer, colour matched head. Minimum embedment to timber 40mm. Note: A4 stainless fasteners required in coastal areas (within 2km of sea water)</p> |
| <p>Sealant types</p> | <p>Roof: Sealant: 5 x 6mm Class A butyl</p> <p>Wall – horizontally laid: Sealant: low modulus, non-setting, neutral cure, gun applied</p> |
| <p>Delivery</p> | <p>Load direct to roof or store at ground level in a protected area, on bearers (placed above each other), at a slope to drain, under tarpaulin if to be stored for longer than a week. Lift with care (do not drag sheets): <6m- by site telehandler or forklift with tines set apart, 1 pack at a time, >6m by crane using slings (not chains). Load to rafter backs. Inspect packs and record any damage/shortages on delivery paperwork, backed by photos to be sent to Trimform with a report within 48 hours.</p> |
| <p>Site work</p> | <p>The installer must comply with current safety and CDM regulations. Guidance is available at www.mcrma.co.uk, CDM2015 tab and Roof Safety tab. Side laps should face away from the prevailing wind Before installation check that the supporting structure is in a fit condition and to an acceptable installation tolerance to receive the roof and wall construction. Fully fix as work proceeds, a profile is only walkable and non-fragile when fixed. Do not over drive fasteners causing washer dishing. Where profiles have to be cut on site:</p> <ul style="list-style-type: none"> • Use a powered nibbler, reciprocating saw or circular saw. Do not use an abrasive wheel. • Support the profile along the line of the cut. • Protect the pre-coated finishes of the profile. • Clean any swarf or debris from the pre-coated finish of the profile immediately. <p>Minor scuffing of the colour coating should not be treated. Deeper scratches which reach the substrate should be repaired with touch-up paint. The touch-up paint should only be applied to the original scratch using a fine paint brush. As touch-up paint will dry to a slightly different colour than the original coating the area which is touched up should be kept as small as possible. Keep foot traffic and following trades traffic to a minimum.</p> |

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Performance

Structural

The loads shown are kN/m², permissible for the profiles at the spans shown (ie load factors are within the tables, compare with unfactored loads).

- The designer must separately check fastener capacity under negative loads (wind uplift/suction).
- Minimum bearing width 40mm.
- “Single” = spanning over 2 purlins, “double” = 3 purlins, “multi” = 4 or more purlins.
- Avoid single spans wherever possible.
- In general, for foot traffic, use crawl boards or additional protection on support centres greater than 1.8 m for 0.7mm steel profiles and 1.4 m for 0.5mm steel profiles.
- Consider crawl boards or additional protection in all cases where the sheets are single spanning.
- For spans exceeding 1.8m refer to Trimform.

BS 5427:16: Appendix C.5.6.4: Partial safety factors for limit state design. Load factors included within the load/span tables:

- Variable loads factor 1.5
- Permanent load factor 1.35
- Accidental load factor 1.0
- Serviceability load factor 1.0

Table 10: Deflection:

- Roofs – imposed loads- L/200
- Roofs –wind L/90
- Walls – wind L/90



0.7mm steel

| Section Properties | f _u = 220N/mm ² | | E = 210kN/mm ² | | Broad flange in compression | | Narrow flange in compression | | |
|--|---------------------------------------|-----------------------------|--|-------------|-----------------------------|---|------------------------------|---|-------------|
| | t _N mm | Weight kg/m ² | Web crushing R _{w,Rd} kN/m | | M _{b,Rd} kNm/m | I _{b,Rd} cm ⁴ /m | M _{n,Rd} kNm/m | I _{n,Rd} cm ⁴ /m | |
| | 0.7 | 6.70 | 8.786 | | 0.980 | 9.811 | 0.925 | 10.326 | |
| TF32/1000 R Roof: 0.7mm steel Negative/wind uplift | Span | | 1.20 | 1.30 | 1.40 | 1.50 | 1.60 | 1.70 | 1.80 |
| | Single | | 3.63 | 3.09 | 2.67 | 2.32 | 2.04 | 1.81 | 1.61 |
| | Double | | 2.28 | 2.02 | 1.80 | 1.61 | 1.45 | 1.32 | 1.20 |
| | Multi | | 2.72 | 2.41 | 2.15 | 1.93 | 1.75 | 1.59 | 1.45 |
| TF32/1000 R Roof: 0.7mm steel Positive/imposed downward | Span | | 1.20 | 1.30 | 1.40 | 1.50 | 1.60 | 1.70 | 1.80 |
| | Single | | 3.43 | 2.92 | 2.52 | 2.19 | 1.93 | 1.71 | 1.46 |
| | Double | | 2.35 | 2.08 | 1.86 | 1.67 | 1.50 | 1.37 | 1.24 |
| | Multi | | 2.80 | 2.49 | 2.22 | 2.00 | 1.81 | 1.64 | 1.50 |
| TF32/1000 R Roof: 0.7mm steel Positive/snow drift loads | Span | | 1.20 | 1.30 | 1.40 | 1.50 | 1.60 | 1.70 | 1.80 |
| | Single | | 5.14 | 4.38 | 3.78 | 3.29 | 2.89 | 2.56 | 2.28 |
| | Double | | 3.53 | 3.12 | 2.78 | 2.50 | 2.26 | 2.05 | 1.87 |
| | Multi | | 4.21 | 3.73 | 3.33 | 2.99 | 2.71 | 2.46 | 2.25 |
| TF32/1000 R Wall: 0.7mm steel Negative/wind suction | Span | | 1.20 | 1.30 | 1.40 | 1.50 | 1.60 | 1.70 | 1.80 |
| | Single | | 3.63 | 3.09 | 2.67 | 2.32 | 2.04 | 1.81 | 1.61 |
| | Double | | 2.28 | 2.02 | 1.80 | 1.61 | 1.45 | 1.32 | 1.20 |
| | Multi | | 2.72 | 2.41 | 2.15 | 1.93 | 1.75 | 1.59 | 1.45 |
| TF32/1000 R Wall: 0.7mm steel Positive/wind pressure | Span | | 1.20 | 1.30 | 1.40 | 1.50 | 1.60 | 1.70 | 1.80 |
| | Single | | 3.43 | 2.92 | 2.52 | 2.19 | 1.93 | 1.71 | 1.52 |
| | Double | | 2.35 | 2.08 | 1.85 | 1.66 | 1.50 | 1.36 | 1.24 |
| | Multi | | 2.80 | 2.48 | 2.22 | 2.00 | 1.80 | 1.64 | 1.50 |

TF32/1000R

| 0.5mm steel | | | | | | | | |
|--|--|-----------------------------|---------------------------------|------|-----------------------------|----------------------------------|------------------------------|----------------------------------|
| Section Properties | $f_u = 220\text{N/mm}^2$ | | $E = 210\text{kN/mm}^2$ | | Broad flange in compression | | Narrow flange in compression | |
| | t_N mm | Weight kg/m ² | Web crushing $R_{w,Rd}$ kN/m | | $M_{b,Rd}$ kNm/m | $I_{b,Rd}$ cm ⁴ /m | $M_{n,Rd}$ kNm/m | $I_{n,Rd}$ cm ⁴ /m |
| | 0.5 | 4.8 | 4.036 | | 0.649 | 6.019 | 0.552 | 6.317 |
| TF32/1000 R Roof: 0.5mm steel Negative/wind uplift | Span | 1.20 | 1.30 | 1.40 | 1.50 | 1.60 | 1.70 | 1.80 |
| | Single | 2.40 | 2.05 | 1.77 | 1.54 | 1.35 | 1.20 | 1.07 |
| | Double | 1.19 | 1.06 | 0.95 | 0.86 | 0.78 | 0.71 | 0.65 |
| | Multi | 1.42 | 1.26 | 1.13 | 1.02 | 0.93 | 0.84 | 0.77 |
| TF32/1000 R Roof: 0.5mm steel Positive/imposed downward | Span | 1.20 | 1.30 | 1.40 | 1.50 | 1.60 | 1.70 | 1.80 |
| | Single | 2.04 | 1.74 | 1.50 | 1.31 | 1.15 | 1.02 | 0.91 |
| | Double | 1.28 | 1.14 | 1.03 | 0.93 | 0.84 | 0.77 | 0.71 |
| | Multi | 1.52 | 1.36 | 1.22 | 1.10 | 1.00 | 0.92 | 0.84 |
| TF32/1000 R Roof: 0.5mm steel Positive/snow drift loads | Span | 1.20 | 1.30 | 1.40 | 1.50 | 1.60 | 1.70 | 1.80 |
| | Single | 3.07 | 2.61 | 2.25 | 1.96 | 1.73 | 1.53 | 1.36 |
| | Double | 1.93 | 1.72 | 1.54 | 1.39 | 1.26 | 1.15 | 1.06 |
| | Multi | 2.28 | 2.03 | 1.83 | 1.65 | 1.51 | 1.38 | 1.26 |
| TF32/1000 R Wall: 0.5mm steel Negative/wind suction | Span | 1.20 | 1.30 | 1.40 | 1.50 | 1.60 | 1.70 | 1.80 |
| | Single | 2.40 | 2.05 | 1.77 | 1.54 | 1.35 | 1.20 | 1.07 |
| | Double | 1.19 | 1.06 | 0.95 | 0.86 | 0.78 | 0.71 | 0.65 |
| | Multi | 1.42 | 1.26 | 1.13 | 1.02 | 0.93 | 0.84 | 0.77 |
| TF32/1000 R Wall: 0.5mm steel Positive/wind pressure | Span | 1.20 | 1.30 | 1.40 | 1.50 | 1.60 | 1.70 | 1.80 |
| | Single | 2.04 | 1.74 | 1.50 | 1.31 | 1.15 | 1.02 | 0.91 |
| | Double | 1.28 | 1.14 | 1.03 | 0.93 | 0.84 | 0.77 | 0.70 |
| | Multi | 1.52 | 1.35 | 1.22 | 1.10 | 1.00 | 0.92 | 0.84 |
| Non Fragility | ACR[M]001:2015 - Test For Non-Fragility of Large Element Roofing Assemblies [fifth edition] 0.7mm: Class B when screw fixed as described in the Installation section 0.5mm: Class B when screw fixed as described in the Installation section | | | | | | | |
| Durability | Refer to Trimform for the durability performance of a particular material. In general:- PVC plastisol finishes have a surface texture (leather grain or scintilla), polyester finishes are smooth. 200µm plastisol PVC paint finishes are most tolerant of foot traffic and installation and are particularly suited to roofing. Colorcoat HPS200 Ultra® has the longest manufacturer-to-building owner guarantee (Confidex®, up to 40 years) Polyester coated materials are the most economic choice. High Build Polyester (HBP) has the best durability and tolerance of installation of the smooth finish polyester painted materials. Standing water must be avoided on pre-painted steel. Pre-painted finishes perform better if exposed to rainwash, this applies to roofs and walls. Roofs and walls should be inspected annually and any debris or items standing on the painted surface removed (build ups of moss/ leaves/ builders debris, dead birds etc). Damage to painted surfaces must be repaired. | | | | | | | |
| Fire properties | Plastisol coated (PVC) steel: External fire performance: European: EN14782:06:5.1.2: Class Broof t(1, 2, 3, 4). Reaction to fire: C-s3,d1 National: notional designation of AA and has a Class 0 or 'low risk' surface as defined in the various national Building Regulations. Polyester coated (PE) steel: External fire performance: European: EN14782:06:5.1.2: Class Broof t(1, 2, 3, 4). Reaction to fire: A2-s3,d0 National: notional designation of AA and has a Class 0 or 'low risk' surface as defined in the various national Building Regulations. | | | | | | | |

TF32/1000R

| References | | | |
|---|---|---|---|
| Reference Standards | <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> BS EN 508-1:2014 BS EN 14782:2006 BS EN 10346: 2015 BS 5427:2016 MCRMA GD 20 Guidance document on serviceability states and deflection criteria </td> <td style="width: 50%; vertical-align: top;"> BS EN 1991-1-3:2003+A1:2015 EN13501-5:2016 ACR[M]001:2014 :5th Edition. MCRMA Guidance Documents and Design Guides www.mcrma.co.uk </td> </tr> </table> | BS EN 508-1:2014 BS EN 14782:2006 BS EN 10346: 2015 BS 5427:2016 MCRMA GD 20 Guidance document on serviceability states and deflection criteria | BS EN 1991-1-3:2003+A1:2015 EN13501-5:2016 ACR[M]001:2014 :5 th Edition. MCRMA Guidance Documents and Design Guides www.mcrma.co.uk |
| BS EN 508-1:2014 BS EN 14782:2006 BS EN 10346: 2015 BS 5427:2016 MCRMA GD 20 Guidance document on serviceability states and deflection criteria | BS EN 1991-1-3:2003+A1:2015 EN13501-5:2016 ACR[M]001:2014 :5 th Edition. MCRMA Guidance Documents and Design Guides www.mcrma.co.uk | | |
| Trimform Products | <p>Trimform Products, Harding Way, Somersham Road, St. Ives, Huntingdon, Cambridgeshire, PE27 3WR T 01480 461103, F 01480 461102, E info@trimformfabs.co.uk Trimform Products (a division of Building Solutions (National) Limited). Registered in England and Wales No. 11912299. ©Building Solutions (National) Limited. Colorcoat HPS200 Ultra® and Confidex® are trademarks of Tata Steel UK Limited</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Assessed to ISO9001:2008 Cert No 1340-01</p> </div> <div style="font-size: 2em; font-weight: bold;">CE</div> <div style="text-align: center;">  </div> </div> | | |