

Gemello[®]
TWIN SKIN SYSTEM

SIG *BUILDING
SOLUTIONS*

Gemello[®] twin skin cladding system from Building Solutions

www.sigbuildingsolutions.co.uk

The Gemello® twin skin system is a comprehensive self-supporting roof and wall cladding solution.



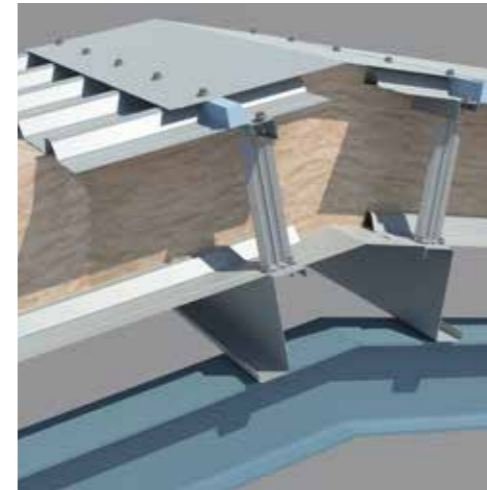
The wide range of external cladding profiles are available in an extensive range of finishes and colours enabling designers to create modern, visually-engaging buildings.

This design flexibility of the Gemello® twin skin system makes it suitable for use on projects across many market sectors including industrial, retail, office, health, education, leisure and agricultural.

The Gemello® systems are suitable for cladding steel framed buildings and can be fully integrated with both modern and traditional methods of construction.

Gemello® systems provide thermal, structural and acoustic properties along with tested fire resistance.

The Gemello® system can be tailored to suit the aesthetic, and design requirements of a building application.



The Gemello® cladding range includes 5 trapezoidal roof profiles, 5 wall profiles and 6 internal liner profiles, all with 1000mm cover width.

All roof profiles are classed non-fragile to the materials standard in the Advisory Committee for Roof Safety “Red Book” ACR[M]001:2019: 6th Edition.

In addition, there are 4 sinusoidal (corrugated) wall profiles available in set widths.

The thermal performance comes from an insulation cavity formed by an engineered bar and bracket spacer system with the void filled using non-combustible mineral or glass fibre insulation under 10% compression. Thermal U-values as low to 0.14W/m²K are typical for lower U-values, contact the Technical team.

Typical Roof System Build-Up

0.7mm coated galvanised outer sheet

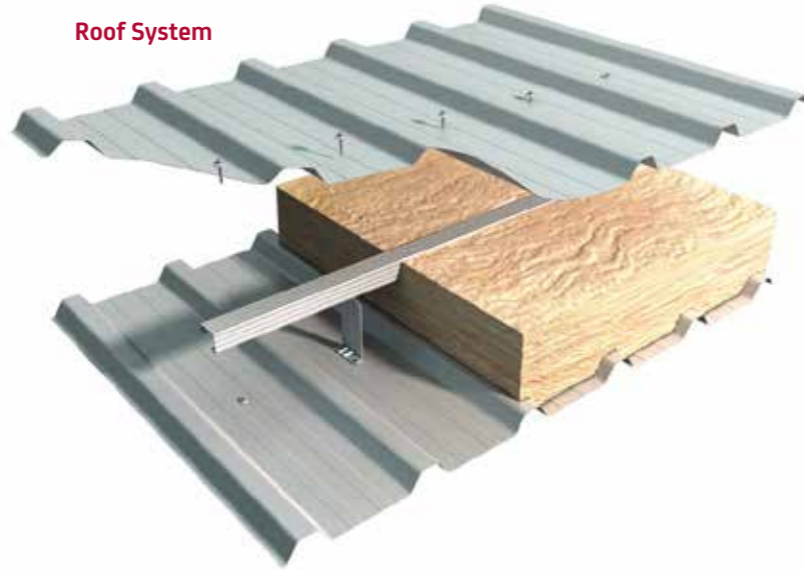
Bar and bracket spacer system

Insulation quilt under 10% compression

0.7mm coated galvanised steel liner

Optional VCL if the liner cannot be robustly sealed

Roof System



Typical Wall System Build-Up

0.5mm coated galvanised outer sheet

Bar and bracket spacer system

Insulation quilt under 10% compression

0.4mm coated galvanised steel liner

Wall System



A wide range of accessories are manufactured and supplied to complete a Gemello® roofing and cladding project.



Rooflights

Site assembled in-plane GRP rooflight are available in a range of Gemello® roof profiles, providing natural daylighting, reducing the need for artificial light, saving energy and can help reduce the carbon footprint of an industrial building.

Gutters

A complete range of gutters and rainwater goods can be manufactured and supplied to meet the specific requirements of an individual project.

Gutters are fabricated in a variety of materials including aluminium, pre-galvanised steel, pre-coated steel with a PVC finish, and membrane lined gutters, to suit the designer's needs.

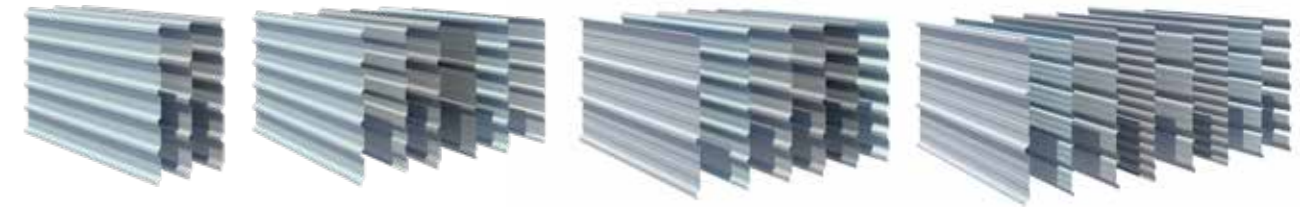
Insulated membrane lined gutters are available for designs where the gutter form part of the insulated building envelope.

Flashings

Flashings can be manufactured in range of finishes and designs to suit a customer's design.

Fasteners, Fillers and Sealants

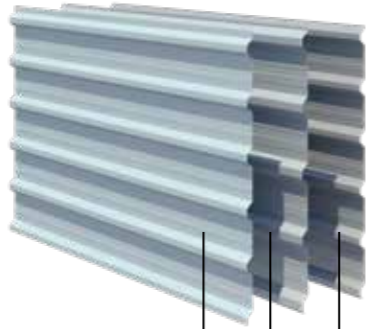
All fasteners, spacer systems, sealants and profiled fillers are to be supplied by SIG Building Solutions to comply with the Gemello® system guarantee.



Coating	Thickness	Applications
Colorcoat HPS200 Ultra®	200µm	Suitable for roofs and walls in severe industrial and coastal/marine environments.
Plastisol Leathergrain	200µm	High performance, durable coating at a competitive price.
Liner	15µm	Suitable for lining roofs and walls. Not suitable for polluted or high humidity environments.
Colorcoat Prisma®	40-65µm	Suitable for roofs and walls in severe industrial and coastal/marine environments where metallic colours are required.

liner profiles

Roof Liner Profiles



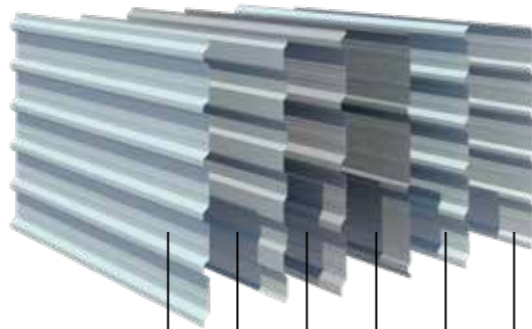
Roof Inner

AS30/1000 L

TF32/1000 L - 4 Pan

URP32/1000 L

Wall Liner Profiles



Wall Inner

AS30/1000 L

AS20/1000 WL

TF32/1000 L - Pan

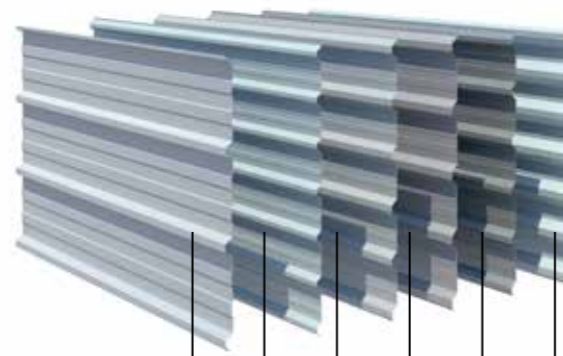
TF17/1000 WL

URP32/1000 L

URP20/1000 WL

external profiles

Roof Profiles



Roof Outer

AS35/1000 R

AS24/1000 R

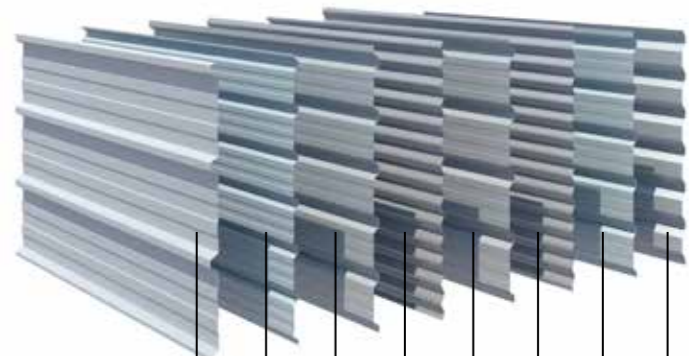
AS30/1000 R

TF32/1000 R - 4 Pan

URP1000/32 R

URP1000/34 R

Wall Profiles



Wall Outer

AS35/1000 W

AS24/1000 W

AS30/1000 W

AS18/990 S

TF32/1000 W - 4 Pan

TF18/1067 S

URP1000/32 W

URP1000/34 W

Coating Warranty

Cladding material	Coating warranty period
Colorcoat HPS200 Ultra®	Up to 40 years
Leathergrain Plastisol	Up to 30 years
Colourcoat Prisma®	Up to 40 years

System Warranty

Gemello® system	System warranty period	Fixing type
Gemello® 30	30 years	A4 (316) Stainless steel
Gemello® 25	25 years	A2 (304) Stainless steel
Gemello® 12	12 years	Carbon steel

A4 (316) Stainless steel fixings for coastal locations.

Gemello® Warranty references consist of both the system and external coating warranty periods. i.e. Gemello® 25/30: 25 year system warranty, up to 30 year material coating warranty.

Acoustics

Sound Insulation Performance, Rw dB

Top sheet	Nett insulation thickness mm	Liner	Rw dB
Roof, 0.7mm steel, 24mm to 34mm profile depth	180	0.7mm steel, 30mm to 32mm liner profile depth	36
Roof, 0.7mm steel, 24mm to 34mm profile depth	290	0.7mm steel, 30mm to 32mm liner profile depth	38
Wall, 0.5mm steel, 24mm to 34mm profile depth	180	0.4mm steel, 17mm to 20mm liner profile depth	34
Wall, 0.5mm steel, 24mm to 34mm profile depth	290	0.4mm steel, 17mm to 20mm liner profile depth	38

U Values

U Values – Roof Systems

U W/m²K	λ0.040 W/mK Nett insulation depth mm
0.25	180
0.20	230
0.18	250
0.16	300
0.15	n/a
0.14	n/a

U Values – Wall Systems

U W/m²K	λ0.040 W/mK Nett insulation depth mm
0.25	180
0.20	230
0.18	250
0.16	300
0.15	n/a
0.14	n/a

Acoustic Notes: Insulation is λ0.040W/mK glass quilt. Rw values are indicative for the range of profile depths. Rw values by MCRMA/Salford University SRIPT software modelling. Solid (non-perforated) liner, 1.5m spans.

U Value Notes: Spacer depth = nett insulation depth. Insulation depth should be +10% for compression. These tables are indicative only. Please contact Technical for scenario specific information.



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