



Product Selector



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A flexible solution - tailor-made for your needs!

Astron is the leading European supplier of steel buildings solutions, designing and producing all the main components of a steel building - the primary and secondary structures, the roof and wall systems, accessories and thermal insulation systems.

A reliable approach for fast turnkey construction primarily for non-residential buildings such as manufacturing plants, warehouses, commercial, sports centres, offices, transportation, garages and aircraft hangars all over Europe and beyond.

Astron provide almost endless construction possibilities and offer architectural and building personalization.

It allows easy architectural integration of traditional building materials, such as brickwork, glazing, timber or light weight concrete.

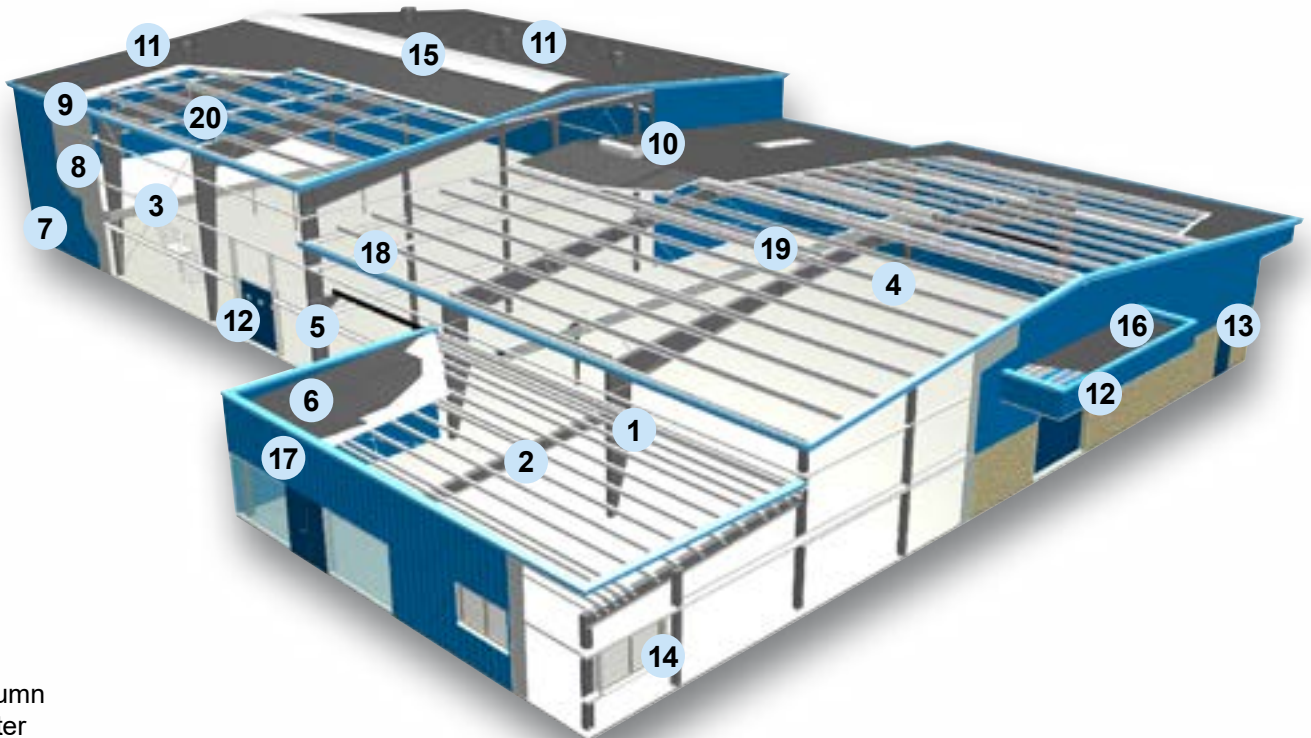
HIGH QUALITY STANDARD:

- Produced according to QMS certified to ISO 9001
- Proofed regularly by Bureau Veritas
- High quality standard certified by CE marking
- Compliance with the EN1090-2 standard
- Accordance with EUROCODE
- ETA certification

ADVANTAGES:

- **Tailor made buildings to meet each customer requirement**
- **Best quality/price ratio**
- **Fixed budget**
- **Short & fixed timeline**
- **One-source supply**
- **Extensive design freedom: flexibility of layouts and building dimensions**

A building system for tailor-made buildings



1. Column
2. Rafter
3. Wind bracing
4. Purlin
5. Girt
6. Roof panel
7. Wall panel
8. Astrotherm insulation
9. Eave gutter
10. Monovent
11. Circular vent
12. Vehicle access door
13. Single door
14. Window
15. Skylight
16. Canopy
17. Parapet
18. Crane beams
19. Bridge crane
20. Mezzanine



The Astron building provides for:

- the easy integration of all traditional construction materials such as brickwork, glazing, timber, etc...

- optimisation in accordance with:

- your requirements,
- your own particular utilisation,
- your need of clear space (clear span from 10 m to 100 m without internal columns)

- the addition of canopies:

- as a direct continuation of the roof line,
- at lower levels with positive or negative roof slopes.

- the addition of parapets:

- partially around the building,
- completely around the building.

- the use of steels with high yield strength which reduce weight, thus optimising the transportation and handling costs whilst meeting all design criteria requirements.


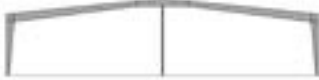







- quality design, manufacturing and erection

All this together ensures a durable building.

AN ASTRON BUILDING INCLUDES:

- All primary and secondary framing
- Choice of different roof and wall systems
- All fixings and connecting parts
- All sealants for weatherproofing
- Thermal and/or acoustic insulation
- Flashings
- Integrated accessories
- Crane beams and rails
- Mezzanine floors

The table shows all Astron standard solutions, nevertheless many other variations are possible. Just ask for your individual solution.

Building types		Building width m	Roof slope %	Eave height m	Bay spacing m
AZM1 Clear span, pitched roof buildings with tapered columns		15.00 - 30.00 30.00 - 60.00	2 - 33 10 - 33	4.20 - 9.00 4.20 - 12.00	5.00 - 12.00
AZM2 Pitched roof buildings with tapered portal frame columns and internal prop columns		18.00 - 30.00 30.00 - 72.00	2 - 33 2 - 33	4.20 - 7.20 4.20 - 12.00	
		18.00 - 72.00	2 - 33	4.20 - 12.00	
AZM3 Pitched roof buildings with tapered portal frame columns and internal prop columns		27.00 - 72.00	2 - 33	4.20 - 9.00	
AP Wing unit structure to be attached to a main building. Special slim parallel flange columns allow for flush inside walls		3.00 - 15.00	2 - 33	3.00 - 6.60	
AL Clear span, single slope buildings with parallel flange columns		6.00 - 12.00	2 - 10	3.00 - 6.60	
AE Clear span, pitched roof buildings with parallel flange columns		10.00 - 20.00	2 - 33	3.00 - 6.60	
AS Clear span, pitched roof buildings for large and very large spans. Tapered columns		42.00 - 72.00	20	5.40 - 9.00	variable
AT Tennis buildings conforming to national regulations available with a standard pitched roof or a polygon roof		variable	33	4.20	



Steel structure / Single-Storey Buildings

The structure consists of columns and rafters made of welded or hot-rolled profiles, purlins and rails of cold-formed galvanized profiles.

PRIMARY FRAMING:

Primary framing consists of all the structural elements which transfer loads to the foundations.

Main frames consist of built-up welded primary framing members, including flange bracings, connection bolts and anchor bolts.

The bases of the intermediate frames are generally pinned, however, certain circumstances may dictate the use of fixed constructions.

Protection:

- All profiles are shot blasted to SA 2.5
- To afford protection during transportation and erection, all profiles receive a primer coat of 80 microns thickness, in either blue or grey.
- Optionally, corrosion protection paint can be provided, with a thickness of 100 microns.

SECONDARY FRAMING:

Secondary framing consists of the elements which support the roof and wall sheeting and which transfer loads to the primary framing:

- Roof purlins
- Wall girts
- Framings of openings

Purlins and girts are galvanized Z profiles, produced by cold roll forming.

- Connections are made using galvanized bolts
- Framing of openings essentially consist of cold-formed L, C, U or Z galvanized profiles.



ADVANTAGES:

- Aesthetic profile
- Optimum clear space
- Easy adaptation of the building in case of modification or change of building use
- Fast and easy erection
- Purlins are cable trays
- Secondary framing galvanized as standard



See the assembling of
an Astron building



Short construction period,
Pre-engineered solutions,
Nice inside view



Large free span for optimum
utilisation of the available floor -
Flexibility of use: to extend-, or
to change the use of the building
or to incorporate new installation

Steel structure / Multi-Storey Buildings

The structure consists of columns, beams and stabilization elements. Beams and columns are made of hot-rolled or welded profiles, purlins and rails of cold-formed, galvanized profiles.

STEEL STRUCTURE:

Columns are fixed to the foundations by anchor bolts embedded in the concrete.
Construction elements are connected to each other with galvanized, high-tensile steel bolts. All welded and hot-rolled construction elements are shot-blasted according to SA 2.5 and have an 80 micron primer coating in either blue or grey. Optionally, elements can be supplied hot-dip galvanized.

The design based on a 3 dimensional approach allows various structure options using narrow columns to meet customer requirements and optimize costs.

INODEK FLOOR BEAMS:

The floor elements are laid on INODEK beams connected to the columns by butt plates.

STABILIZING ELEMENTS:

The diaphragm effect of the floor elements, as well as the wind bracing in the roof ensure the horizontal stability of the building.

Depending largely on the arrangement of the façade, but also on the building use, vertical stability is provided by additional elements, combined under specific conditions; these may be:

- Cross bracing (the basic option, low cost and highly effective)
- A stabilization frame, which allows greater flexibility in the installation of doors and windows
- Concrete walls or concrete cores such as lift wells or staircases



ADVANTAGES:

- Few and narrow columns, therefore wide, empty floor spaces
- Low building height due to integrated beams
- 3D design for an optimised conception
- Quick and simple erection thanks to bolted connections



Discover this multi-storey building shown on the right page

Integrated floor system (no protruding beams). **Easy and low-cost** installation of heating and ventilation systems



Slim structure - **Fast and easy erection** - Reduced floor depths and overall height of the building



LMR600

Standing seam roof mechanically fixed using unique sliding clips.

TECHNICAL SPECIFICATIONS:

- Consists of 600mm wide roll formed panels with a 70mm high corrugation
- The panel is fixed with a clip allowing linear and lateral expansion and contraction
- The flat side of the panel contains cross flutes improving the panel rigidity under foot traffic
- The panels are produced in 0.66mm nominal thickness Aluzinc coated high tensile strength steel
- Standing seam

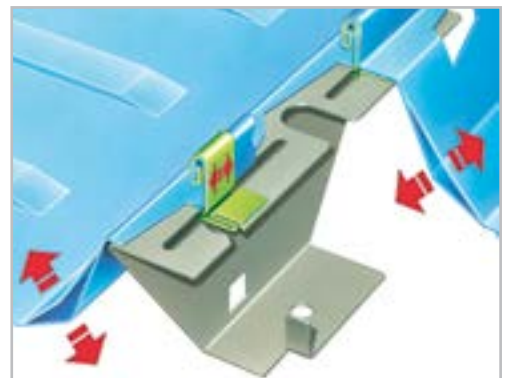
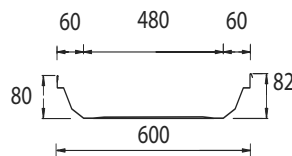
COLOURS AND COATINGS:

- Aluzinc AZA (metallic coating)

ACCESSORIES:

In order to maintain the watertightness integrity and aesthetic appearance, a full range of accessories adapted to LMR600 roof systems have been developed:

- Skylights
- Smoke vents
- Ventilators
- Polycarbonate vaults
- Roof curbs
- Monovent



ADVANTAGES:

- The clip allows free expansion and contraction, thus avoiding any stress in the roof system
- Long-lasting, ultimate moisture-tightness
- Side lap formed on site with a special seaming machine, crimping a 360° double-lock seam
- The panel is connected to the secondary structure with a special clip and roll formed on its top into the seam
- Once seamed the entire roof forms a monolithic metal membrane
- Thermal bridges reduced to spacing clips



See the LMR600
with all its features



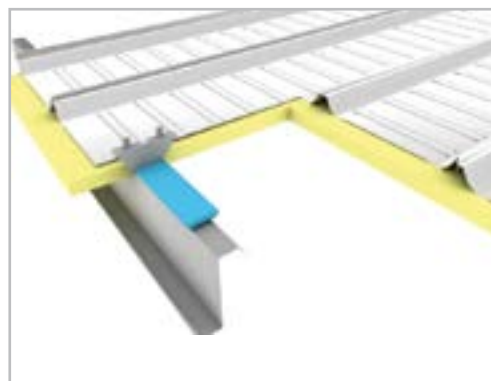
SINGLE SKIN ROOF WITH OR WITHOUT ISOBLOC:

- This system is the most cost-effective
- The insulation is made of soft faced glass fiber providing good acoustical comfort
- It is available with Isobloc and increased insulation thickness to improve overall thermal performance and reduction of thermal bridges

+/- with Isobloc

Insulation (mm)	60+	80+	100+	120+
U-value $W/(m^2 \cdot K)^*$	0.67	0.57	0.51	0.50

* The U-values are guaranteed for an installed product when the nominal thickness of the insulation is maintained in the middle of a purlin spacing of 1500mm or more.

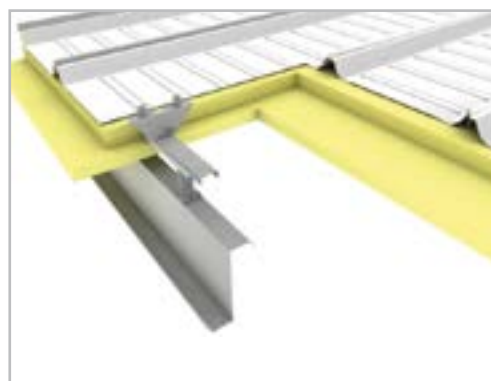


SINGLE SKIN ROOF WITH BRIDGE:

- This system offers superior thermal efficiency and advanced condensation control by reducing the thermal bridge to a minimum. It also prevents the insulation being compressed at the location of the secondary framing elements
- It increases insulation thickness through spacer bridge

Insulation (mm)	140	160	200
U-value $W/(m^2 \cdot K)^*$	0.29	0.27	0.25

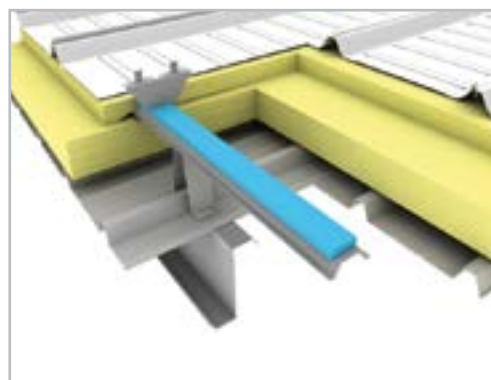
* The U-values are guaranteed for an installed product when the nominal thickness of the insulation is maintained in the middle of a purlin spacing of 1500mm or more.



DOUBLE SKIN ROOF:

- It offers the best possible insulation up to 260mm
- It includes all the advantages of the bridge solution
- It has a solid and aesthetic appearance thanks to the internal panel that acts as vapour barrier, best fire rating
- Optional acoustic panel for increased noise absorption
- Excellent solution for buildings with a high relative humidity inside

Insulation (mm)	120	140	160	200	260
U-value $W/(m^2 \cdot K)$	0.33	0.29	0.25	0.20	0.17



LPR1000

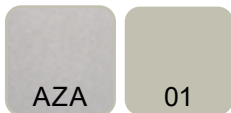
Long span ribbed panel.

TECHNICAL SPECIFICATIONS:

- Long span ribbed panel: coverage width 1000mm
- 0.50mm core thickness, high tensile strength steel – S550
- Fixed to the structure with self-drilling stainless steel screws

COLOURS AND COATINGS:

- Exterior coating: Aluzinc (AZA) or Superpolyester
- The LPR1000 panel can be delivered in any RAL colour.
- Delivery times and costs depend on the amount of steel ordered. For short delivery times, we provide some stock colours, which you can see below:



ACCESSORIES:

In order to maintain the watertightness and aesthetic appearance, a full range of accessories adapted to LPR1000 roof systems have been developed:

- Skylights
- Translucent panels
- Smoke vents
- Ventilators
- Polycarbonate vaults
- Roof curbs
- Monovents

The side lap incorporates 2 key features:

- Overlapping corrugation provides increased stability during the installation.
- Tape sealer

ADVANTAGES:

- **An economical and practical solution**
- **An increase in safety and watertightness thanks to the strength of its fixation**
- **Attractive and economical**
- **Easy to install**
- **Cost-effective energy efficiency**
- **Long-term performance**



Scan to see an attractive building using LPR1000 panels

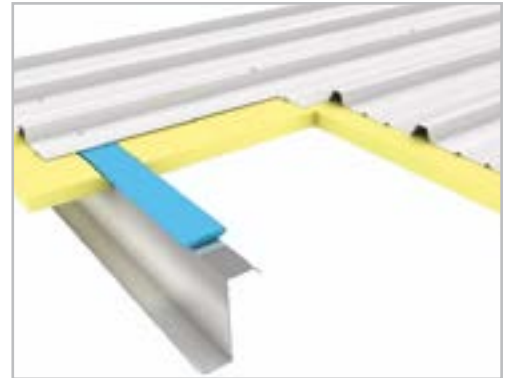
SINGLE SKIN ROOF WITH OR WITHOUT ISOBLOC:

- This system is the most economical
- The insulation is made of soft faced glass fiber providing a good acoustical comfort
- It is available with Isobloc and increased insulation thickness to improve overall thermal performance and reduction of thermal bridges

Insulation (mm)	60	80	80+	100+	120+
U-value $W/(m^2 \cdot K)^*$	0.94	0.81	0.60	0.49	0.42

+/- with Isobloc

* The U-values are guaranteed for an installed product when the nominal thickness of the insulation is maintained in the middle of a purlin spacing of 1500mm or more.



SINGLE SKIN ROOF WITH BRIDGE:

- This system offers superior thermal efficiency and advanced condensation control by reducing the thermal bridge to a minimum. It also prevents the insulation being compressed at the location of the secondary framing elements
- It increases insulation thickness through spacer bridge

Insulation (mm)	120	140	160	200
U-value $W/(m^2 \cdot K)^*$	0.34	0.31	0.29	0.26

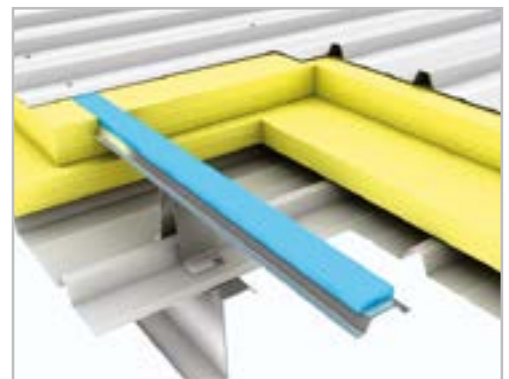
* The U-values are guaranteed for an installed product when the nominal thickness of the insulation is maintained in the middle of a purlin spacing of 1500mm or more.



DOUBLE SKIN ROOF:

- It offers the best possible insulation up to 260mm
- It includes all the advantages of the bridge solution
- It has a solid and aesthetic appearance thanks to the internal panel that acts as vapour barrier, best fire rating
- Optional acoustic panel for increased noise absorption
- Excellent solution for buildings with a high relative humidity inside

Insulation (mm)	120	140	160	200	260
U-value $W/(m^2 \cdot K)$	0.33	0.29	0.25	0.21	0.17



Polar roof system

The Polar roof is a complete roof system based on sandwich panels. It includes all the necessary framed openings, fasteners and finishing flashings.

Polar panels consist of two profiled ribbed coated steel panels, produced by cold roll forming, between which CFC-free polyurethane foam is factory injected.

Different insulation thicknesses and panel profiles are available within the Polar roof system. The U-values of the different products are those published by the panel manufacturers.

TECHNICAL SPECIFICATIONS:

- All standard panel thicknesses available.
- Higher thicknesses on demand
- The U-values of the different products are those published by the panel manufacturers.

COLOURS AND COATINGS:

- The Polar roof systems offer different coatings to satisfy the various climatic requirements.
- Exterior coatings and colours are those published by the panel manufacturers.
- Interior coatings: Superpolyester in grey white

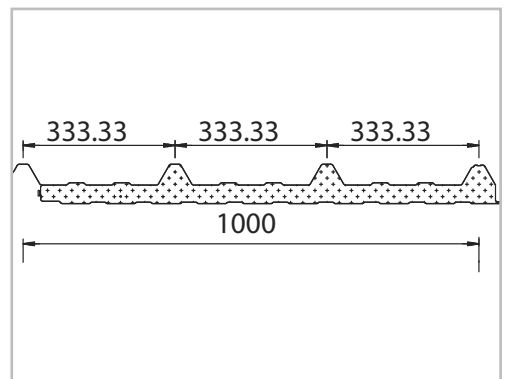
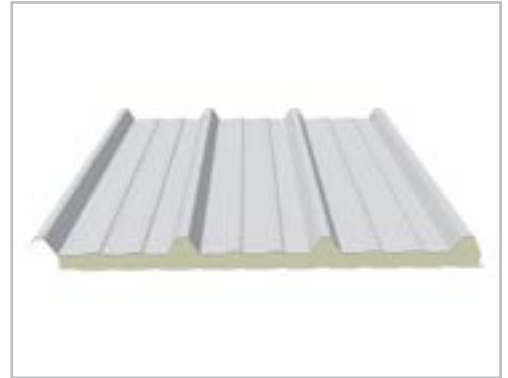
ACCESSORIES:

A full range of accessories adapted to the Polar roof system has been developed to ensure optimum watertightness and pleasing aesthetics:

- Skylights
- Translucent panels
- Smoke vents
- Polycarbonate vaults
- Roof curbs

ADVANTAGES:

- High degree of thermal insulation
- Aesthetical interior finish
- Quick erection
- Easy maintenance
- Large range of integrated accessories
- Fixed with stainless steel self drilling screws



Scan to see various wall and roof systems

Spacetec/Multitec built-up roof systems

Both low pitch roof systems consist of ribbed steel panels and allow the application of a built-up roof system. The Spacetec roof system is purlin-free, the panels are directly fixed to the upper flange of the primary framing. The Multitec roof system is fixed onto purlins.

SPACETEC

Spacetec does not require secondary framing. Slim, discrete compression tubes are installed on the lower flanges of the rafters to transmit the forces from the wind bracing tie rods. Framed openings are concealed within the depth of the roof panel. The thermal insulation depends on the type of the built-up roof.

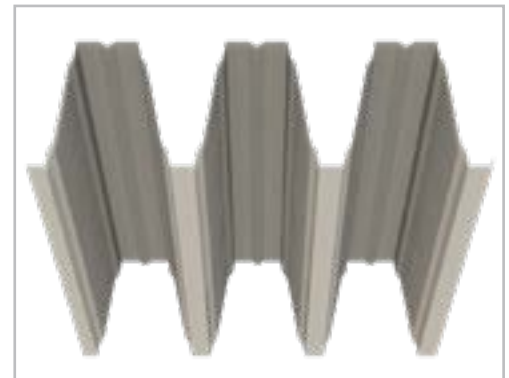
COLOURS AND COATINGS:

Interior coating: Superpolyester in grey white



ADVANTAGES:

- Aesthetically pleasing interior aspect of the building roof: ideal for sports halls, airport buildings, supermarkets, showrooms, etc.
- Low pitch roof creates simple and economical parapets
- Reduced peak height
- Quick and easy erection
- Fully integrated accessories: skylights, smoke vents, polycarbonate vaults, roof curbs



MULTITEC

Multitec panel is fixed to the secondary framing by self-drilling screws. The panel overlaps are fastened with stitching screws. The secondary framing is normally Z purlins fixed with a 1.5m purlin spacing to the primary framing. The thermal insulation varies depending on the type of the built-up roof adopted.

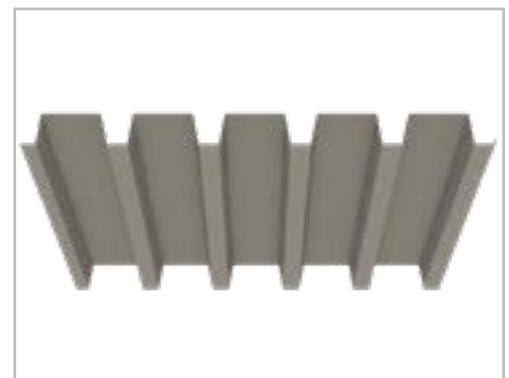
COLOURS AND COATINGS:

Interior coating: Superpolyester in grey white



ADVANTAGES:

- Simple and economical parapets
- Can be used for complex roof shapes
- Economical rain water drainage
- High degree of thermal insulation (depending on the specification of the built-up roof system)
- Reduced peak height
- Fully integrated accessories: skylights, smoke vents, polycarbonate vaults, roof curbs

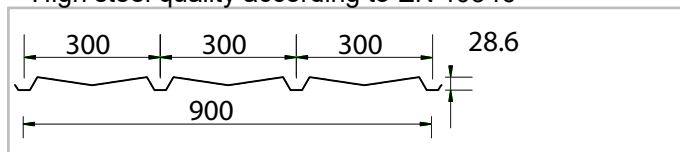


LPA900 - LPI1200 - LPG1000 wall systems

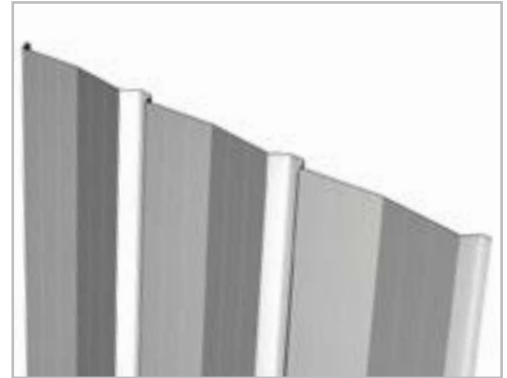
The LPA900 wall panels consist of ribbed steel panels, externally fixed to the secondary framing with self-drilling screws with composite nylon heads, coloured to match the sheeting.

LPA 900 WALL SYSTEM:

- Long span ribbed panel: coverage width 900 mm
- Nominal thickness of 0.49 mm
- High steel quality according to EN 10346



LPA 900



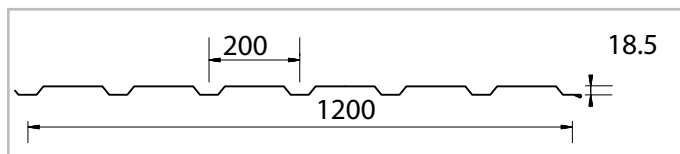
COLOURS AND COATINGS:

- Exterior coating: Superpolyester
- The LPA900 panel can be delivered in any RAL colour.
- Delivery times and costs are dependent on the amount of steel ordered. For short delivery times, we provide some stock colours, which you can see below:

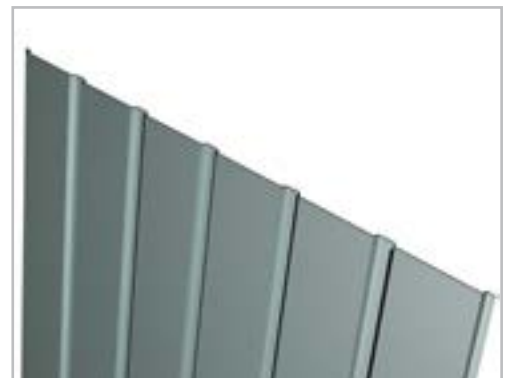


LPI1200 - LPG1000 INSIDE SHEETING

Two interior sheeting options are available, LPI1200, and the perforated LPG1000 for a pleasing interior finish and excellent sound absorption. Both panels hide the secondary framing. Interior coatings: Superpolyester in grey white



LPI1200



ADVANTAGES:

- **Economical, functional and durable construction**
- **Aesthetically pleasing panel with discreet ribbed profile**
- **Easy replacement of damaged panels**
- **Simple and quick erection**
- **High performance coatings**
- **Large range of integrated accessories**
- **All flashings and connecting parts available**

ACCESSORIES:

A full range of accessories adapted to the wall system has been developed to ensure an optimum watertightness and pleasing aesthetics, such as:

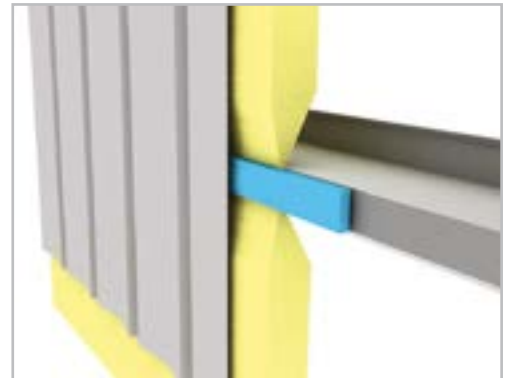
- single or double personnel doors,
- translucent panels,
- wall louvres,
- framed openings,
- flashings and trims...

SINGLE SKIN WALL WITH OR WITHOUT ISOBLOC:

- This system is the most economical
- The insulation is made of soft faced glass fiber providing good acoustical comfort
- It is available with Isobloc and increased insulation thickness to improve overall thermal performance and reduction of thermal bridges

Insulation (mm)	40	60	80	80+	100+
U-value $W/(m^2 \cdot K)^*$	0.91	0.79	0.61	0.53	0.44

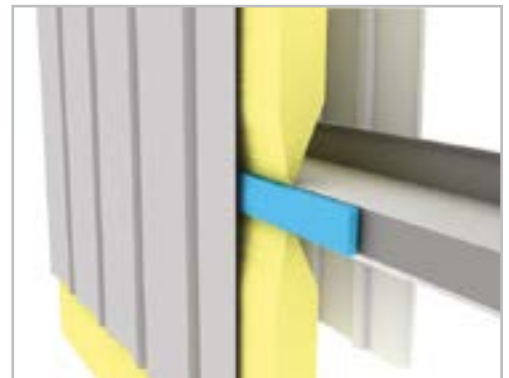
* The U-values are guaranteed for an installed product when the nominal thickness of the insulation is maintained in the middle of a purlin spacing of 1500mm or more. += with Isobloc



SINGLE SKIN WALL WITH INSIDE SHEETING:

Inside sheeting (LPI1200 or perforated LPG1000) can be fixed internally

- It includes all the advantages of the single skin wall with Isobloc
- The secondary wall framing is not visible offering a better inside view and aesthetic appearance
- In order to meet ultimate insulation requirements a second layer of insulation can be added to reach up to $0.3 W/(m^2 \cdot K)$



ARCTIC WALL:

- This system offers the best possible insulation values
- Good combination with double-skin roof, but also uninsulated LPA900 wall
- Optimized transport: less volume + one source for different products
- Smart erection: building can be closed quicker, no need of cranes
- Nice aesthetic: no girts visible from inside
- Excellent fire resistance

Insulation (mm)	240	290
U-value $W/(m^2 \cdot K)$	0.210	0.176



Polar wall system

The Polar wall is a complete wall system based on sandwich panels. It includes all the necessary framed openings, fasteners and finishing flashings.

Different insulation thicknesses and panel profiles are available within the Polar wall system. They consist of two profiled ribbed coated steel panels, produced by cold roll forming, between which CFC free polyurethane foam is factory injected. The tongue and groove jointing arrangement ensures watertightness.

TECHNICAL SPECIFICATIONS:

- All standard panel thicknesses available.
- Higher thicknesses on demand
- The U-values of the different products are those published by the panel manufacturers.

COLOURS AND COATINGS:

- The Polar wall systems offer different coatings to satisfy the various climatic requirements.
- Exterior coatings and colours are those published by the panel manufacturers.
- Interior coatings: Superpolyester in grey white

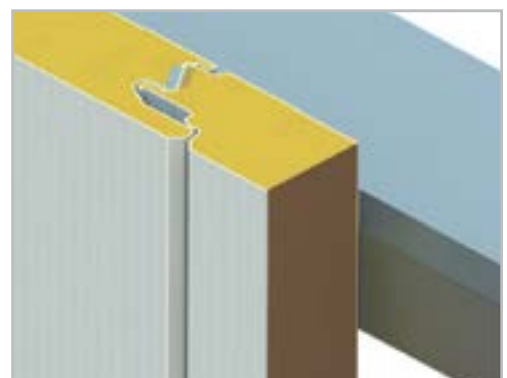
ACCESSORIES:

A range of fully compatible accessories is available for each of the Polar wall systems. They ensure complete watertightness and pleasing aesthetics:

- Single or double personnel doors
- Truck doors
- Window frames
- Framed openings
- Wall louvres
- Flashings and trims

ADVANTAGES:

- High degree of thermal insulation
- Aesthetical exterior and interior finishes
- Easy maintenance
- Quick erection
- Large range of integrated accessories
- Fixed with stainless steel self drilling screws



Mezzanines

Mezzanines are an important feature of many industrial and commercial/retail buildings, both to suit requirements of modern stocking and storage techniques and to maximise the efficiency of machinery layouts and production flows.

Hollow-core concrete solutions:

INODEK SYSTEM:

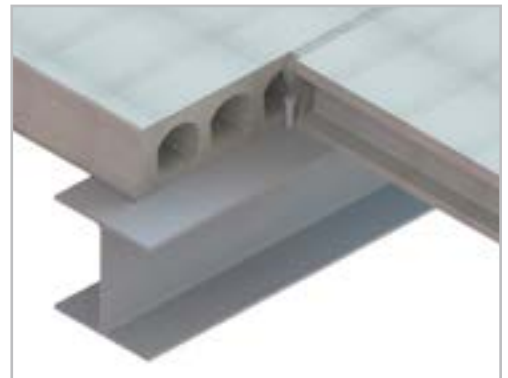
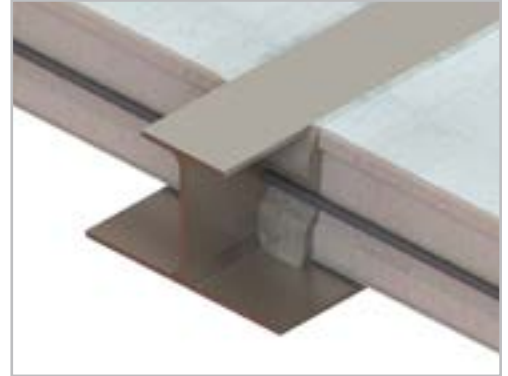
A floor beam system based on a steel frame which provides the full advantage of slim floor construction, yet avoids the disadvantages of downstanding beams:

- Pre-engineered and prefabricated elements
- Faster construction
- Spans up to 7.5m
- Anti-fire protection easy to achieve, only the lower flange has to be protected
- No downstand beams/no service obstruction

MONODEK SYSTEM:

Beams are designed to accept precast concrete slabs (hollow-core concrete elements).

- Spans between 5 and 9m
- Fast and easy erection
- Economical construction

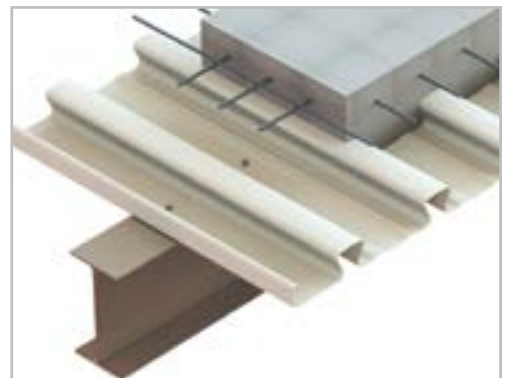


In-situ concrete solution:

MULTIDEK SYSTEM:

Generally the concrete is cast on metal decking, which can be laid continuously, allowing design optimisation of sections to reduce weight and cost.

- Maximum flexibility for positioning and size of openings, even after completion of the mezzanine design and construction
- Multidek beam spans up to 9m
- Floor beam spacing are usually 3m



ADVANTAGES:

- **Single source supply for mezzanine and building**
- **Integrated design of the mezzanine in the building**
- **Maximized use of building space**
- **Reduced construction time: simultaneous erection of mezzanine and the building**
- **Guaranteed quality by use of precast elements, in steel or in concrete**



Astrotherm insulation

Astrotherm insulation consists of a fibre glass blanket with a laminated vapour barrier. Isoblocs significantly reduce thermal bridges and Alustrip improves the overall appearance of the insulation joints.

FIBRE GLASS BLANKET:

Consists of a flexible blanket of high quality fibre glass, based on a thermo-setting synthetic resin with a homogeneous fibre fleece and long fibres, without residual or reused materials.

- Density: 16kg/m^3
- Thermal conductivity: $0.037\text{W}/(\text{m}\cdot\text{K})$
- Nominal thicknesses: 40, 60, 80 and 100mm
- Lengths: Factory cut-to-length rolls to suit each project
- Packaging: in perforated polybags and labelled for correct identification on jobsite



VAPOUR BARRIERS:

Consist of a glass-scrim reinforced film bonded to the fibre glass blanket. The vapour barrier is wider than the actual insulation width, creating overlaps strengthened by a double glass-scrim reinforcement (60mm) for stapling together.

ERECTION:

Astrotherm insulation is unrolled and stretched over purlins or girts (except in double skin roofs). The longitudinal assembly of layers is achieved by double stapling the two adjacent overlaps thus ensuring the continuation of the vapour barrier.

ADHESIVE:

The vapour barrier is bonded to the fibre glass blanket with an adhesive, which contains a fire retardant.

ISOBLOC:

Isoblocs are insulating strips made of extruded polystyrene boards. Isoblocs are located over purlins and girts and significantly reduce thermal bridges.

ALUSTRIP:

Alustrip is a colour coated strip stretched over purlins and located under the sidelaps of the layers, in order to ease erection and to improve interior aesthetics.

N.B.: delivery of Alustrip is optional



ADVANTAGES:

- Thermal and acoustic insulation
- High insulation values
- Tailor-made supply, minimal waste
- High density fibre glass for long-lasting quality
- Large range of vapour barriers
- Excellent fire classification
- Fast erection



See the production of
an Astron building

Astrotherm U-values:

Thickness (mm)	40	60	80	100
U-value W/(m ² ·K)	0.82	0.57	0.43	0.35

Vapour barrier specifications and EU fire ratings

Type	Fire rating according to EN 13501-1	Definition	Specification highlights
ASA	A1	<ul style="list-style-type: none"> • painted alufoil • glass scrim reinforcement • aluminium film 	<ul style="list-style-type: none"> • non-combustible • light grey colour
AVS	A2-s1, d0	<ul style="list-style-type: none"> • painted alufoil • glass scrim reinforcement • PVC film 	<ul style="list-style-type: none"> • excellent fire rating • good appearance • light grey colour • good vapour permeability • very good quality/price ratio
KAS	D-s1,d0	<ul style="list-style-type: none"> • alufoil • glass scrim reinforcement • kraft paper 	<ul style="list-style-type: none"> • good fire rating • good vapour permeability • aluminium colour • economical

Russian certification of fire safety

Type	Inflammability	Combustibility	Smoke formation
Astrotherm without facing		NG	
Astrotherm with facing ASA	V1	G1	D1
Astrotherm with facing AVS + KAS			D2

Definitions: V1: low flammability
(according to ANTIP) V3: high flammability

NG: non-combustible
G1: low combustibility
G3: normal combustibility

D1: low smoke formation
D2: medium smoke formation
D3: high smoke formation



Crane rail beams



STANDARD SUPPLY:

- Beams with rails 50 x 30mm fixed by intermittent welding
- All fixing components, cleats and fasteners
- Standard finish: shot blast SA 2.5 and shop primer 80 microns
- Static calculations and erection drawings

Options:

- Heavy-duty rails
- Laminated rails for easy replacement of the crane rail
- Continuous welding of crane rail to crane beam
- End stop, excluding rubber buffers
- Final paint



CRANE RAIL BEAMS DESIGNED ACCORDING YOUR NEEDS:

- Standard crane capacity: < 15 tons
- Standard crane span: < 25m
- Standard classification:
 - H2, B3 (according to DIN)
 - French group II (following CTICM)
- Span of beam: from 6 to 9m bay spacing, with a limit of 8m for crane capacity above 12.5 tons
- One crane per crane beam, or in case of several cranes, by adding spacers to preserve the design integrity of the beam
- Crane types: I (single girder) and II (double girder)
- Hoisting tool: hook
- **Higher classifications or loads on special request.**



ADVANTAGES:

- **Perfect integration in Astron building**
- **Optimisation between bay spacing and crane beams span**
- **Single source supply for crane beams and building**
- **Integrated design of the crane rail beams in the building**



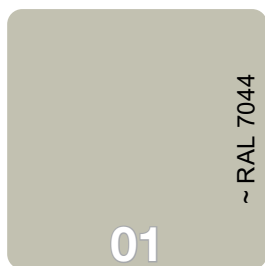
Astron colours



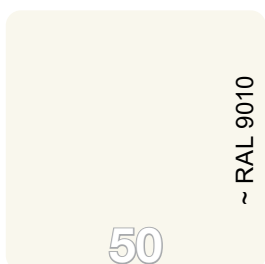
All RAL colours can be delivered. Delivery times and costs depend on the amount of steel ordered. For short delivery times, we provide some stock colours, which you can see below:



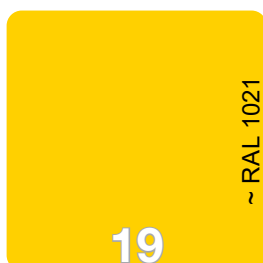
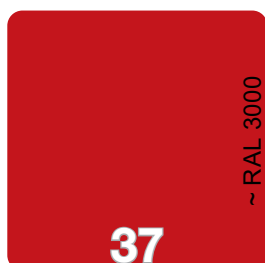
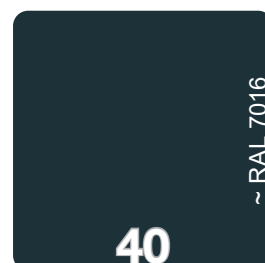
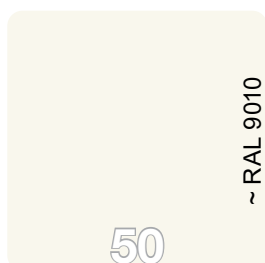
ROOF



WALL



GUTTER & RAKE



Due to printing limitations, the shown colours on this chart are not exact.
If a precise match is required, a metallic sample should be requested.

www.astron.biz



Astron Buildings ▪ info@astron.biz

Czech Republic:

Kojetínská 3228
75002 Přerov
+420 581 250 321
info.cz@astron.biz

Germany:

Wilh.-Theodor-Romheld-Str. 32
55130 Mainz
Tel.: +49 (0)6131 8309-0
info.de@astron.biz

France:

15-19, rue des Mathurins
75009 Paris
+33 (0)1 57 96 75 99
info.fr@astron.biz

Hungary:

Derkovits u. 119
4400 Nyíregyháza
+36 42 501 310
info.hu@astron.biz

Italy:

Via S. Antonino, n. 110
26010 Vaiano Cremasco (CR)
+39 342 8951439
info.it@astron.biz

Luxembourg:

Route d'Ettelbruck
9230 Diekirch
+352 802 911
info@astron.biz

Poland Warszawa:

Żeromskiego 77
01-882 Warszawa
+48 22 489 88 91
hale@astron.biz

Poland Wrocław:

Szewska 75/77
50-121 Wrocław
+48 71 377 18 82
hale@astron.biz

Romania:

Soseaua de Centura nr. 8
Stefanestii de Jos 077175
Ilfov
+40 744 328 000
info.ro@astron.biz