



Aluminium-Profiled Sheets

Profiled Facades and Roofs

**Profiled sheets from Novelis offer architects and clients a myriad of possibilities for the creative use of facades, ceilings and roofs in building design – old and new, traditional and modern.**



**Give your roofs and facades more of a profile!**

**Novelis profiled sheets**

are available with different surface appearances:

- mill finish and stucco embossed
- coil coating method in either polyester or Pvd coating
- pre anodised

**Surface finishes and coating – a look at what’s underneath**

**4**

Aesthetic effect and vibrant colour depend on the quality of the coating. We tell you more about coating processes and our range of colours...

**Trapezoidal profiles – adding profiles to surfaces**

**6**

Shape your facades – play around with shapes and colours from the ceiling to the roof. We give you more detail about the possibilities...

**Corrugated profiles – on the up!**

**10**

Corrugated patterns are eye-catching; they play with the light and give shape to surfaces in a quite unfamiliar manner. We tell you more about corrugated design...



**Perforated profiled sheets** 13

A combination of functionality and decorative design

**Anodised profiled sheets – accent on roofs** 14

The lightweight option for roofs – lighter and more cost effective than most, robust, long-lasting and low maintenance.

**Product Description** 16

Novelis Profiled Sheets –  
The range of applications in modern architecture is virtually infinite.

**Technology and environment** 18

Real environmental protection

**A glimpse below the surface – Profiled sheets from Novelis are carefully prepared for outdoor use through alloy preparation, pre-treatment, primer coating and top coating.**



## Colour Coating

Our coil-coating method ensures a durable aesthetic effect and a high degree of colour consistency. The trapezoidal and corrugated profiles are also available with plain and stucco embossed surfaces or roll-formed with pre-anodised aluminium.

**Highly resistant to wind and weather** – Profiled sheets from Novelis have proven themselves in extreme climates and the most diverse weather conditions all over the world. The colours have a high UV resistance and to brittleness caused by light and environmental effects. The surfaces are dirt-repelling and (if necessary) easy and environmentally friendly to clean.

**Quality Control** – Our quality control system meets all current German and European standards. More information on page 16.

**The coil coating method** – Coating of the front face: Profiled sheets in standard colours are stove-enamelled with polyester or PvdF paint in two coats.\* Coating of the reverse face: The back of the profiled sheets is coated with transparent protective lacquer, a batch number and with Novelis logo'd protective film applied to the prime surface. Special colours are available upon request.

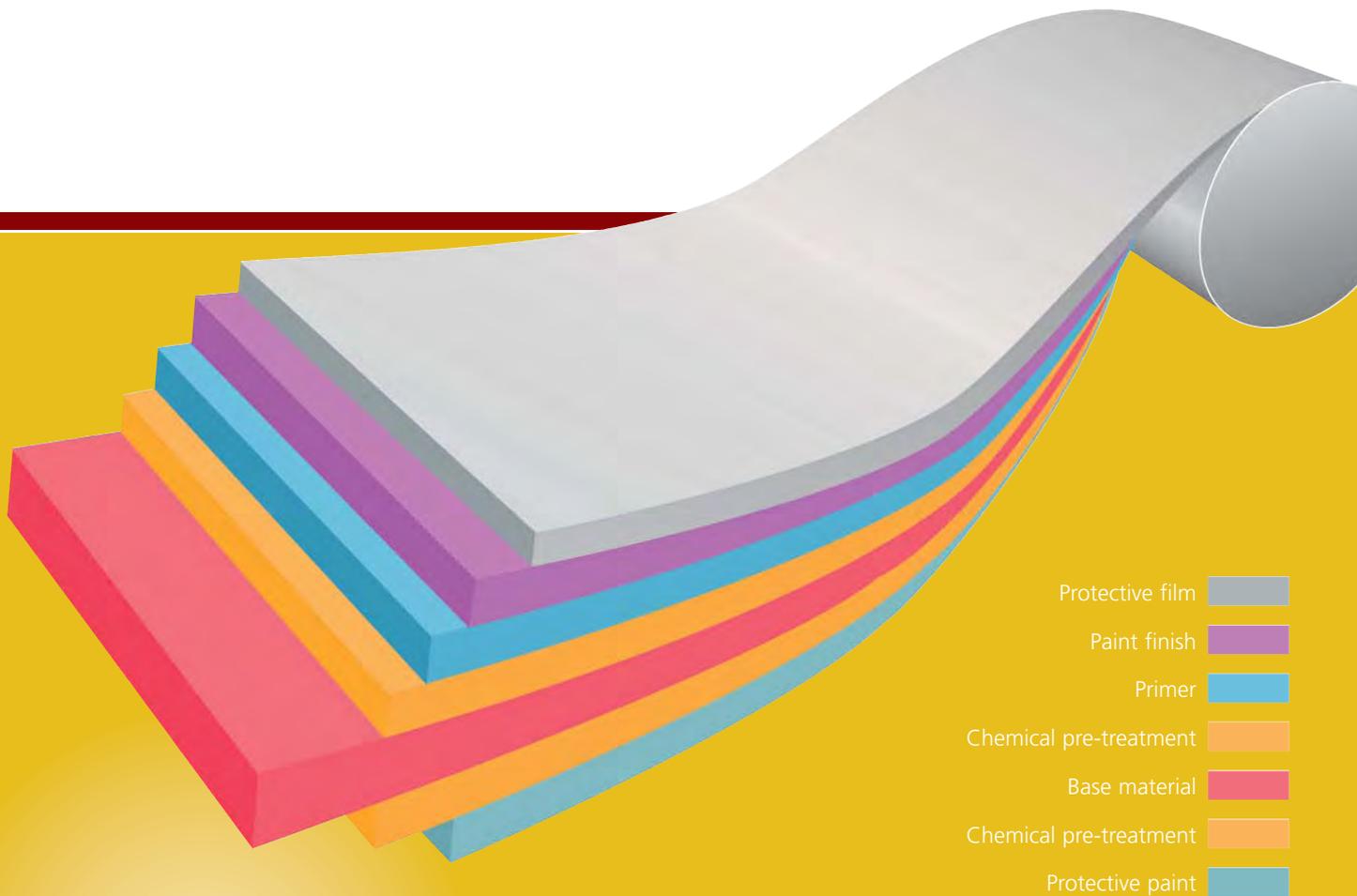
**Paint coat thickness** – On the front face: approx 25µm for standard colours. On the reverse face: approx. 3 – 5µm.

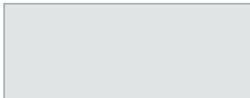
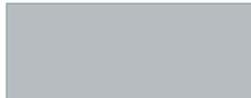
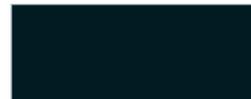
\*The coil coating method provides longevity in aesthetic appearance and colour consistency

**Gloss** – Approx. 20 units by Gardner measuring method, measuring angle 60°

**Fire protection** – Profiles sheets from Novelis are non-flammable in accordance with DIN4102-A1

**Colours** – As a result of printing, the colour samples shown on the following page may vary slightly from the original shades. Only original sample sheets provide an exact likeness. We reserve the right to make changes in the interests of technical development.



				
1126-20 Nevada beige PE	1901-20 Grey white PE ≈ RAL 9002	1997-20 Pure white PE ≈ RAL 9010	16C9-15 Blue green PE ≈ RAL 6004	1612-20 Lode green PE
				
1512-20 Ultramarine blue PE ≈ RAL 5002	1306-20 Ruby red PE ≈ RAL 3003	2923-20/-40 White Aluminium PE/PVdF ≈ RAL 9006	2947-20 Grey Aluminium PE+PVdF ≈ RAL 9007	1816-20 Cola brown PE
				
1826-20 Brick brown PE ≈ RAL 8016	1819-15 Mahogany brown PE ≈ RAL 8004	1345-15 Oxide red PE ≈ RAL 3009	1007-15 Jet black PE ≈ RAL 9005	17F7-15 Anthracite grey PE ≈ RAL 7016

**Creativity with profile – the attraction of modern architecture is particularly enhanced by the use of contrasting components.**



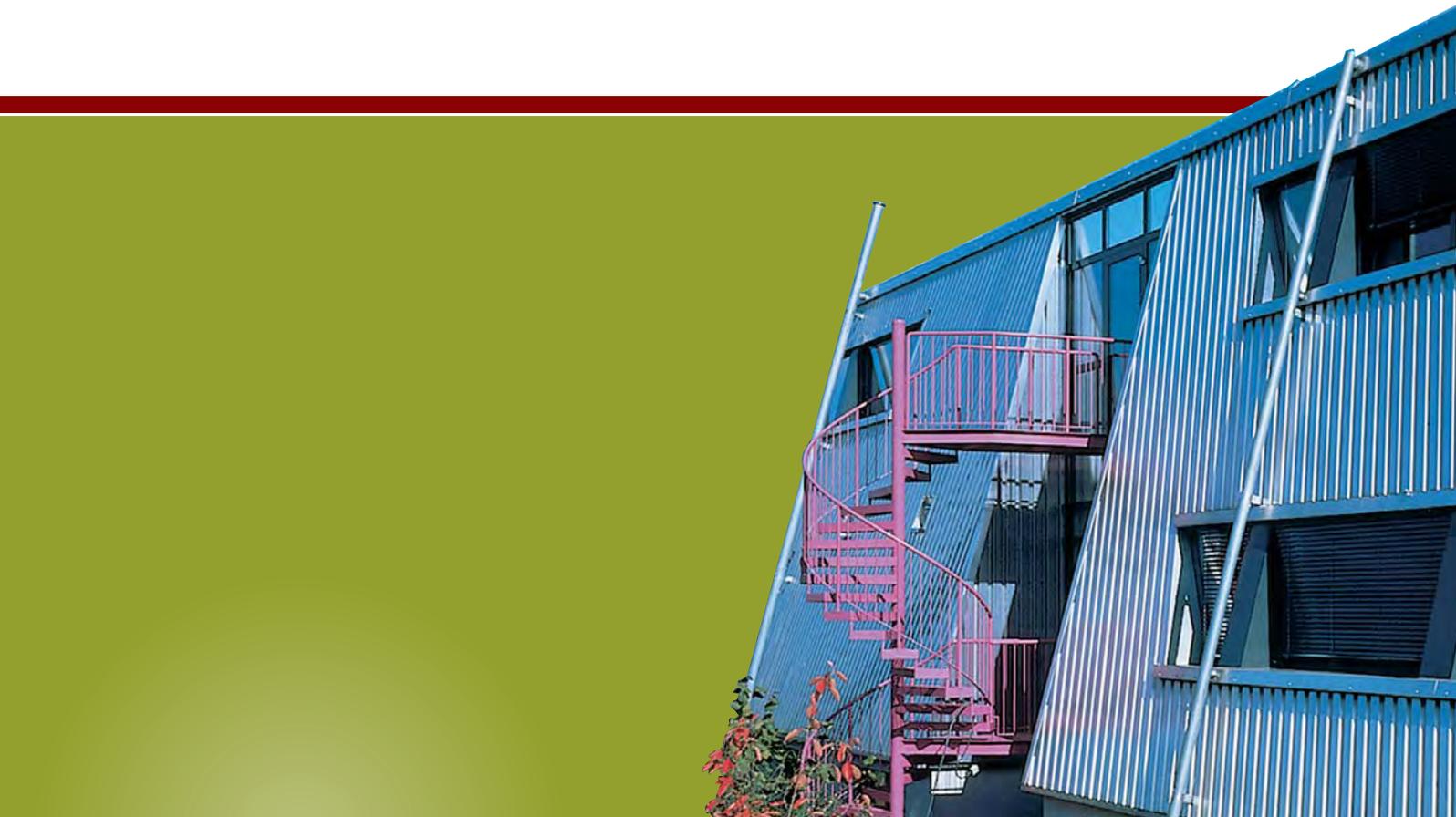
## Trapezoidal profiles for roofs and facades

Trapezoidal profiles from Novelis have become a fixed component in roof and facade architecture, particularly because of their versatility, flexibility and aesthetic effect.

**Tailor made design** – The different geometries of the trapezoidal profiles offer architects and clients a myriad of possibilities to give creative shapes to roofs, facades and ceilings.

The large range of standard and metallic colours offers further potential to give the building an individual look. Novelis trapezoidal profiles are available in mill finish, stucco embossed as well as pre-anodised finishes.

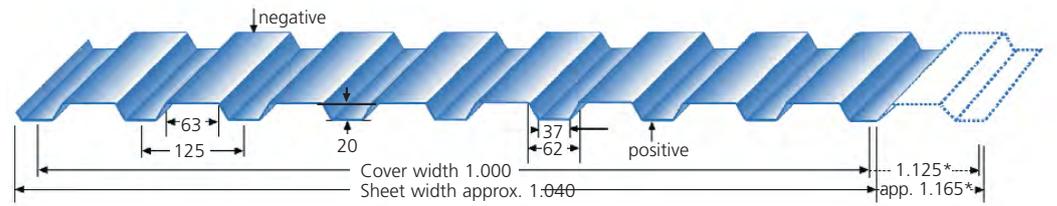
**Flexibility through and through** – The thing that makes the trapezoidal profiles from Novelis so versatile and cost-effective is the fact that they are ready to use accessories, specialist sheets and profiles are available from dealers for almost any difficult area of roof and facade covering – corners, edges flashings, openings for ventilation, chimneys, skylights, etc. Naturally, the accessory sheets are of the same high quality as the trapezoidal profiles from Novelis.



**Cost-saving and long-lasting** – There are some further plus points for outdoor use. The trapezoidal profiles are easy to cut and quick to assemble. They have been statically optimised for use in roof and façade. They will withstand extreme weather conditions for many years.

And Novelis trapezoidal profiles require only minimum maintenance, which means that ambitious design is not only cost-effective to create, but also to maintain.

## Trapezoid 20/125

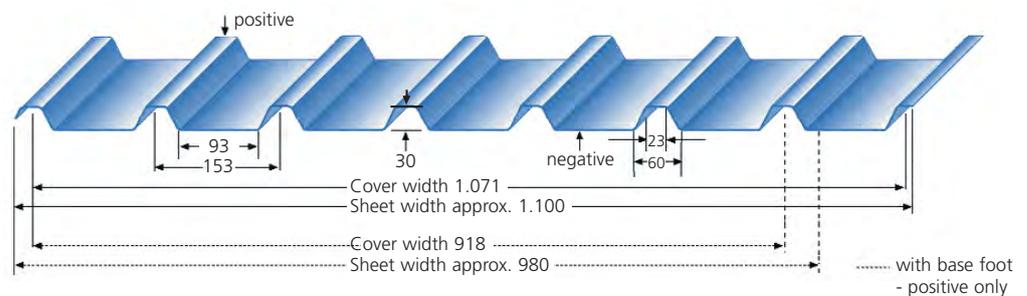


20/125					
Sheet thickness [mm]	0,35	0,50	0,70	0,80	1,00
kg/qm <sup>2</sup> covered area	1,14	1,63	2,28	2,61	3,25



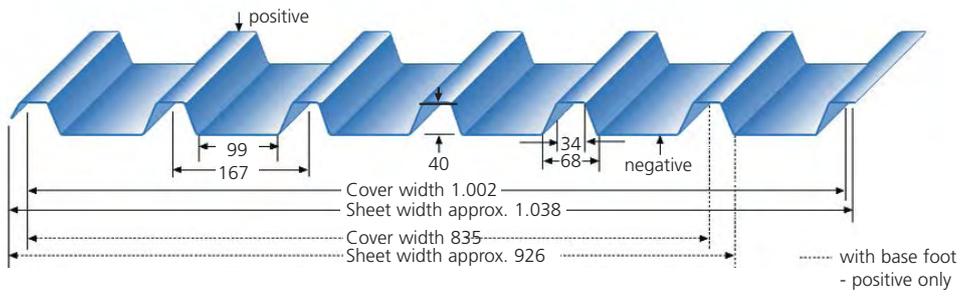
## Trapezoidal profiles – an overview

### Trapezoid 30/153



30/153				
Sheet thickness [mm]	0,50	0,70	0,80	1,00
kg/qm <sup>2</sup> covered area	1,70	2,38	2,72	3,38

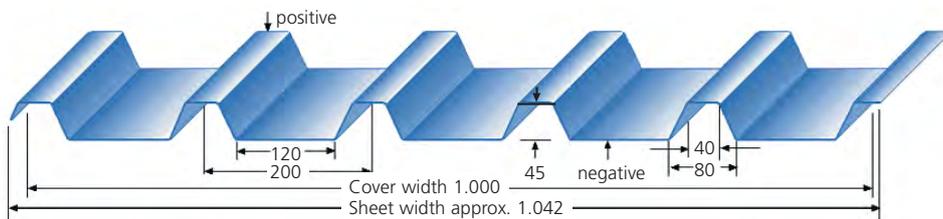
## Trapezoid 40/167



40/167				
Sheet thickness [mm]	0,50	0,70	0,80	1,00
kg/qm <sup>2</sup> covered area	1,82	2,54	2,90	3,61



## Trapezoid 45/200



40/200			
Sheet thickness [mm]	0,70	0,80	1,00
kg/qm <sup>2</sup> covered area	2,55	2,91	3,62

**Corrugated profiles are on the up! – The rise in popularity is quite astounding – the classic corrugated profile, almost forgotten years ago, has become the favourite profiling element in modern roof and facade design.**



## Corrugated profiles for roofs and facades

Its structured and contoured surface, gives them surprisingly new and unfamiliar shapes. As light and shadows fall over the profiles, the architecture changes from one moment to the next.

**Freedom in shape...** – The 18/76 corrugated profile can be mounted vertically and horizontally, and is equally suitable for rear-ventilated and unventilated buildings and as a roof covering. Let your imagination run wild!

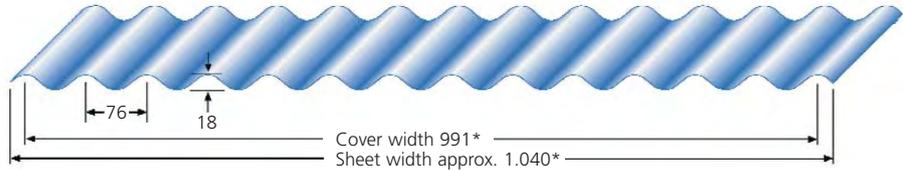
**...and in colour** – You can create a particular impression with corrugated profiles with brilliant metallic-coloured coatings, which gives the corrugation a special silver matt gloss. What's more, the 18/76 profile is also available with plain or stucco embossed surface and in other standard ad metallic colours (for colour samples, see page 5).

New is the corrugated profile 18/76 in pre-anodised aluminium.



**Corrugated profiles are flexible** – Like the trapezoidal profiles, our corrugated profiles are easy to cut, fast and reliable to assemble and extremely long-lasting and weatherproof. An extensive range of accessories and ready-to-use components including everything from ridge flashing to tailor-made curved arches mean that even the most specific building requirements can be made cost effectively.

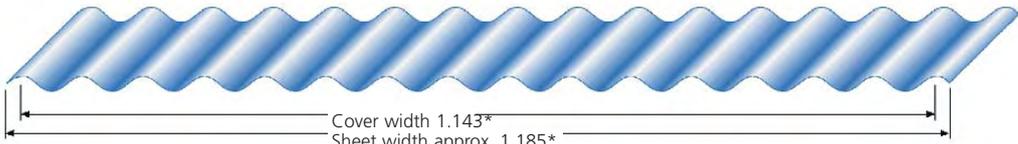
**Corrugation 18/76**



\* sheet thickness of 0.5 mm: cover width 1,005 mm / sheet width approx. 1,055 mm



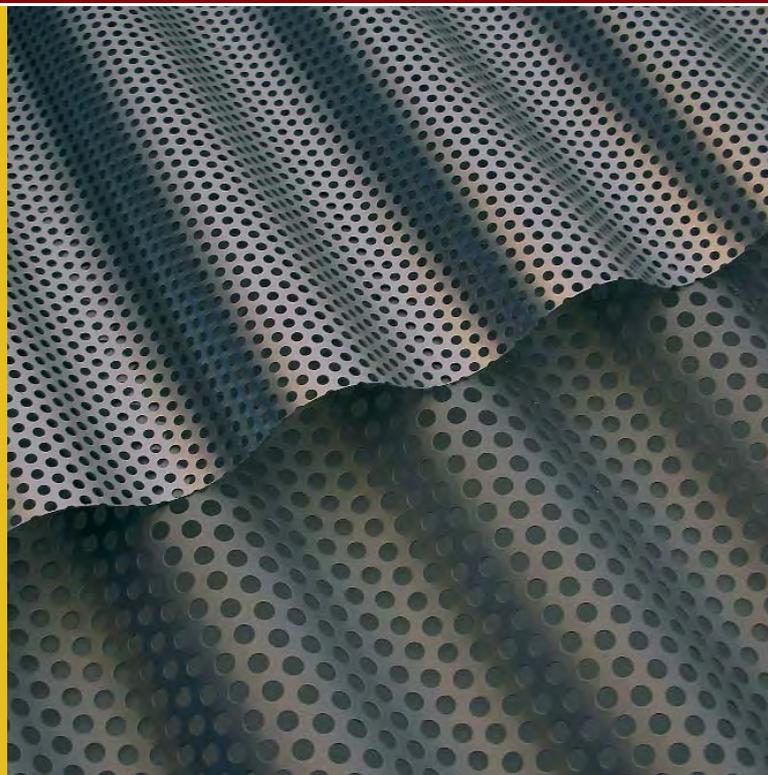
Corrugated profiles  
– an overview



\* available width sheet thickness of 0.7 mm or above

<b>18/76</b>				
Sheet thickness [mm]	0,50	0,70	0,80	1,00
kg/qm <sup>2</sup> covered area	1,58	2,22	2,53	3,16

## Perforated profiled sheets



Be creative with our perforated profiled sheets.

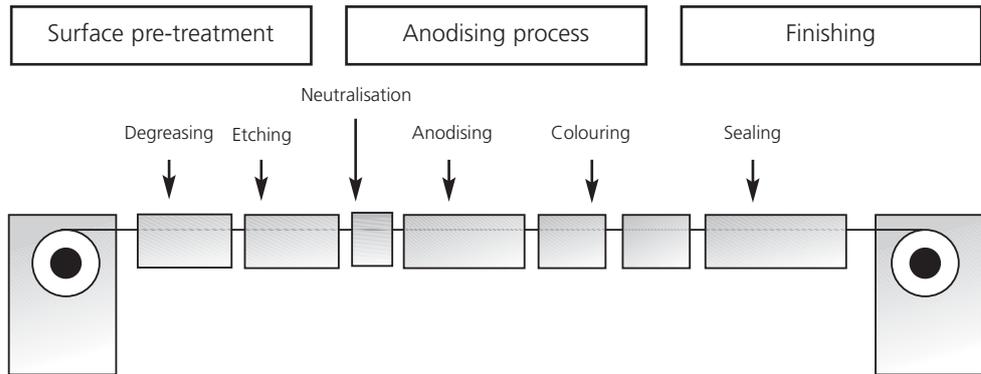
This product combines functionality with decorative design.

The use of perforated profiled sheets for facades provide a screen, looking from the outside of the building but offers incidence of light to the building simultaneously.

In combination with a sound-damping fleece the profiled sheet either on the wall or on the ceiling establishes a quite unique atmosphere.



## Novelis profiled sheet - Now available with Anodised finish.



## Anodised aluminium profiled sheets from Novelis

Profiled sheets with completely new, highly decorative surfaces are now an integral part for exterior architecture:

High colour consistency, exceptional brilliance and an excellent weathering resistance distinguish this product.

Types of profiles: Corrugation 18/76 · Trapezoidal 20/125

Colours: Natural and Light Bronze B40

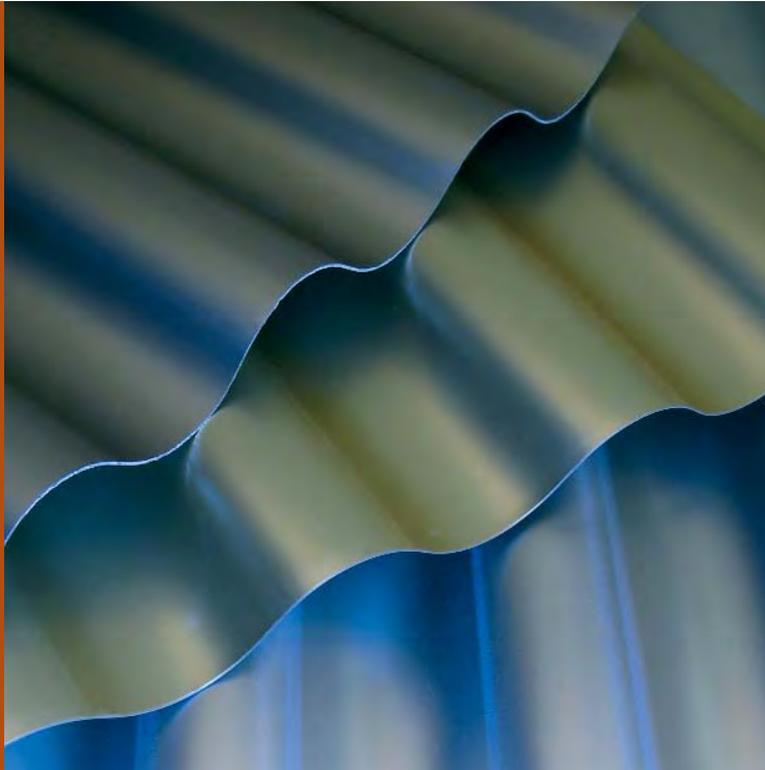
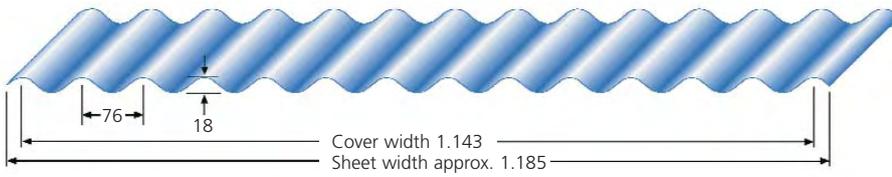
Anodising Layer: By way of continuous anodising process  
and pre-treatment

Guage: 0,7 mm

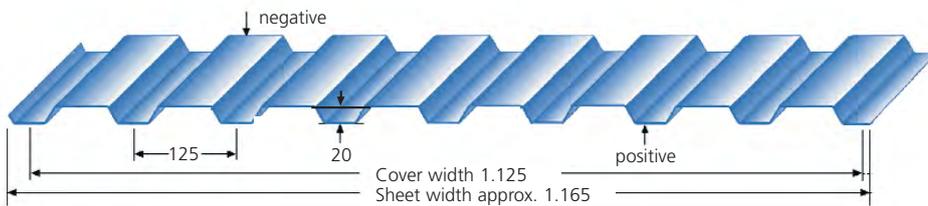
Alloy: J 57 S (EN AW 5005)

Temper: H16

### Wave 18/76



### Trapezoid 20/125



	18/76	20/125
Sheet thickness [mm]	0,70	0,70
kg/qm <sup>2</sup> covered area	2,22	2,28

**Novelis profiled sheets – Your range of application in modern architecture are almost infinite.**



## Product Description

**Alloy** – strength and surface treatment are tailor made for architectural applications:

- mill finish, stucco embossed and coil coated: EN AW 3005 (AlMn1Mg0,5)
- pre-anodised EN AW 5005 (AlMg1-B)  
according to EN 573-3

**Quality Control** – We comply with all current European standards including DIN, ASTM, BS, EN and ISO 9001. The most important feature of our quality assurance system is compliance with the testing criteria set out by the ECCA for coil-coated surfaces \*) As regards building supervision, the use of Novelis aluminium profiled sheets is regulated by type sheets in compliance with DIN 18807.

**Areas of application** – Novelis aluminium profiled sheets are used in facade, roof and ceiling covering, on the walls of residential and office buildings, in industrial buildings, technical plants and for demanding architectural applications.

### Profiled sheets overview

- Corrugated 18/76: for roof and facade coverings for use in demanding applications
- Trapezoidal 20/125: for ceiling and facade coverings.
- Trapezoidal 30/153: for roof and facade coverings; only requires minimal number of fixing points
- Trapezoidal 40/167: for use in all areas
- Trapezoidal 45/200: for roof and facade coverings; with extra-large cross section for ventilation



### The benefits at a glance

- Improved resistance against corrosion due to coating
- Non-flammable (96/603/EG and DIN 4002-A1)
- Light and extremely strong
- Fast and simple to apply
- Reduces algae/moss accretion
- Aesthetic effect
- Not susceptible to fracture
- 100% recyclable
- Higher strengths in the alloy enable higher static exposure and span-widths

**Sales in Europe** – Novelis is represented by its own „Market Centres“ or dealers in all European countries. We would be pleased to put you in touch with your nearest Novelis sales partner.

**Accessories** – To enable you to make customised shaped parts, accessories including sheet-end seals, saddle washers, screws, sealing strips, profile fillers and plain sheets (1.0mm) are available. The accessories are available from Novelis dealers. The surface quality standards as Novelis’ profiled sheets.

Please note:  
The sheets can be formed. A bending radius of 2.5 x material thickness should be allowed.  
Novelis is a member of the ECCA.

\*) ECCA: European Coil Coating Association, Brussels. The members of the ECCA undertake to maintain the consistently high quality of precoated materials and to ensure their sustainability for use in the construction industry. Novelis is a member of the ECCA.

**Our commitment to the protection of people and the natural environment means taking responsibility for the entire life cycle of our products – from aluminium extraction and processing to recycling once the product reaches the end of a long service life.**



## Technology and environment

It is our primary objective to make this process as environmentally sound as possible.

### **Step one:**

**Aluminium extraction** – The energy required to extract aluminium is mainly generated from hydro-electric sources to save on raw materials such as coal, gas and oil. Instead of using primary aluminium, 95% of Novelis aluminium profiled sheets are now produced from recycled aluminium (secondary aluminium). This is because aluminium is a high quality metal which lends itself perfectly to an energy-saving recycling process and can be fed back into the resource cycle any number of times without loss of quality.

### **Step two:**

**Production** – Our production operations also use environmentally sound processes. Our cleaning systems use water-saving cascade technology, and the “no-rinse” process – a technique developed by Novelis – used in the pre-treatment of aluminium strips which omits the usual water-intensive rinsing operations. When it comes to emissions protection, we are considerably below the statutory minimum standards. These are just three examples of the practical environmental management system that runs throughout our production operations.



**Step three:**

**Recycling and sustainability** – As part of our commitment to taking total responsibility for all our operations, Novelis has its own recycling plants in the UK and Italy and invests some Euro 100 million per year in them.

And behind everything we do lies the principle of sustainability – the continual development of technological processes for the protection of people and nature at all stages of the product life cycle. This principle has our continuous commitment.



[www.novelis-nachterstedt.com](http://www.novelis-nachterstedt.com)



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at the time of printing and incorporate the  
experience gathered up till such time. We  
therefore reserve the right to make modifications.