



**NEOBOND<sup>®</sup>**

# Aluminium Composite Panel general guidelines

# NEOBOND®

## Aluminium Composite Panel

### General information

NEOBOND® composite panel is a sheet material composed of two layers of metal bonded to an inner core material.

Colour variation may occur between panels from different production batches.

The entire amount of required material for the project must be ordered as a single batch.

Any colour from the RAL, Pantone, NCS colour charts or custom colours can be supplied. Minimum order quantity is applied.

When using various NEOBOND, NEOBOND/FR or NEOBOND/A2 product series, colour variation may occur between different product types due to the individual production processes. It is recommended not to mix different product types if colour consistency is required.

When working with NEOBOND® panels staff should wear gloves to avoid staining.

### Dimension tolerances

Thickness, mm	Width, mm	Length, mm	Diagonal, mm
-0,2...+0,2	0...+4	0...+15	-5...+5

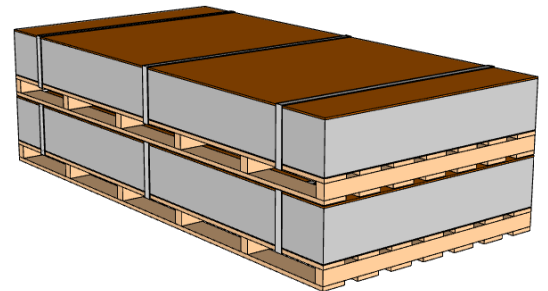
### Transportation and storage

While NEOBOND® panels are supplied on

pallets, they should be operated and handled with care.

To avoid any deformation or damage do not store the pallets of different type and size on top of each other. Pallets of the same type must be stacked one over the other, not more than 6 pallets, the heaviest at the bottom of the stack.

Store the pallets so that they are protected against any dirt, moisture, direct sunlight and harmful weather conditions.



Store the panels horizontally.

When unloading, individual panels must be lifted up vertically by two people holding all four corners.

Carry the panels vertically.

Do not move or draw panel on top of the other panel's surface.

Nothing should be placed in between panels when stacking to avoid surface damage.

Avoid any particles occurring between panels.

Labels or tape stickers also should not be used.

Do not mark the protective film with the inks (permanent marker pens, paint, etc.)

## **Processing and fabricating**

NEOBOND® composite panels are suitable for cutting, CNC milling, shearing, punching and roll bending.

All NEOBOND® panels are covered with the protective peel-off film.

When assembling batch items, operators should follow the arrow directions marked on the protective film and nest elements on sheets according to the design to avoid gloss and reflection differences.

When processing (cutting, bending, protective film removal, etc.) NEOBOND® panels, the temperature of panels should not fall below +10°C to avoid cracking of aluminium layer.

Working zone must be cleared from chips, off-cuts and other particles that can harm or damage panels.

Only suitable tools and machinery should be used when working with NEOBOND® panels.

## **Protective film**

All NEOBOND® panels are covered with protective film, which should not be removed before fabrication and installation operations are finished to avoid surface damage.

After installation is finished, the protective film should be peeled off within 45 days (under normal weather conditions), but it is recommended to remove the film as soon as possible. The film should be peeled off slowly and evenly.

It is recommended to remove the protective film from every single wall surface simultaneously to avoid colour differences between individual elements.

In case the adhesive residues are left on the panel surface after protective film removal, use White Spirit (Turpentine) or Isopropyl Alcohol to clear away the adhesive.

## Installation

The protective film of NEOBOND® panels has an arrow sign, which indicates panels' direction. It is recommended to install the composite panels in the same direction, as indicated by the arrows on the protective film to avoid differences in gloss and reflection (for metallic colours, as well as special coatings and natural metal series) – see figures below.

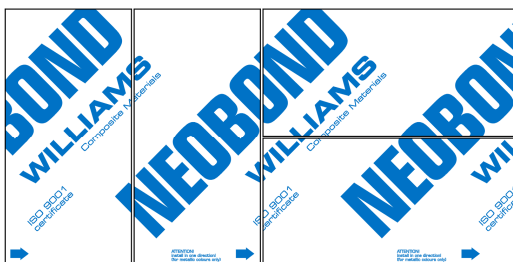


Fig. 1. Correct

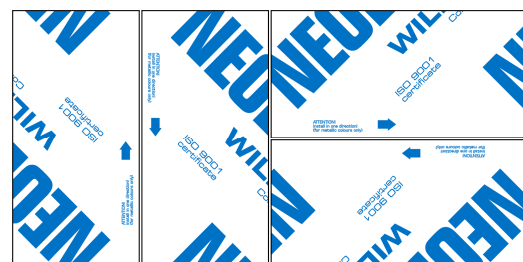


Fig.2. Not correct

Different fixing techniques can be used for NEOBOND® panels installation, therefore the appropriate materials should be used in every case.

When placing panels on the sub-construction profiles, both panels and profile thermal expansion coefficients and directions should be considered.

In case of riveted panels, clamping force should be controlled to avoid surface deformations. For sliding points of fixation the special nose piece must be used to provide a gap between rivet head and panel outer surface.

### Special requirements for NEOBOND®/A2 panels

When installing NEOBOND®/A2 panels outdoors, any open edge should not to be exposed to weather impacts, therefore edge folding should be used. Punched or perforated panels are not suitable for outside cladding.

## **Cleaning and care**

Aluminium composite panels should be cleaned with water and neutral (mild) cleaning agent.

Surfaces must be cleaned either manually or with a suitable cleaning device from top to bottom.

The frequency with which cleaning should be carried out generally depends on local environment conditions and degree of contamination.

The cleaning operation must be followed by a thorough rinse with clean water to ensure the removal of all cleaning agent residues. It is recommended to do a final wipe down with a sponge, leather or a dry cloth to avoid any water stains. Cleaning agents or any type of liquids should not to be left to dry on panel surface.

Do not clean hot surfaces (above 40°C) to avoid rapid drying which may lead to stain formation.

Do not use any alkaline cleaning agents such as potassium hydroxide, sodium carbonate or caustic soda. Do not use powerful acidic products, abrasive scouring agents or lacquer-dissolving cleaning agents.

Prior to cleaning it is recommended to test the cleaning product in an inconspicuous area.

## **NEOBOND® Digital handling and processing**

Panels for direct UV printing have special coating under the transparent protective film. The film should be peeled off slowly and evenly. Once the protective film is removed, the printing surface can not be touched with hands; use special gloves instead.

NEOBOND® Digital panels must be stored at the room temperature for at least 24 hours before printing.

Only genuine inks for rigid media recommended by the printing machine manufacturer should be used.

The temperature should not exceed 80°C during the printing process.

# **NEOBOND<sup>®</sup>**

**Aluminium Composite Panel**

## Unlimited Possibilities

**Williams Ltd., 5 Zemitana str.,  
Riga LV-1012, Latvia  
Phone: (+371) 67843779;  
Mobile: (+371) 26396890;  
e-mail: [info@williamscomposite.com](mailto:info@williamscomposite.com)  
<http://williamscomposite.com>**