



PREMIUM GLOSS FINISH

Formica® AR Plus®

Formica® AR Plus® is a high pressure gloss laminate with mark and scuff resistance superior to traditional laminates.

APPLICATIONS

Formica AR Plus is widely used where good appearance, resistance to marking and scuffing, and resistance to stain from ordinary sources is required. These include counters, bench and table tops, store fixtures, office furniture, vanity units, display work, reception areas, wall panelling, toilet partitions and door & drawer fronts.

AR Plus can also be used for whiteboards provided that instructions contained in the Formica Care & Maintenance Guide are followed.



PRODUCT CHARACTERISTICS

Size	3595mm x 1395mm
Thickness	1.2mm (nominal) (±0.1mm)
Weight	1.2kg/m ² approx.
Finish	High Gloss AR Plus
Colour Range	Refer to current Product Availability Chart

FIRE PROPERTIES

The Group Number Classifications are generated from tests carried out and data reduced in accordance with the test procedure described in ISO 5660 2002 - Reaction to fire test - Part 1: Heat Release and Part 2: Smoke Production Rate for the purposes of determination of the Group Code Verification Method C/VM2 Appendix A.

Formica laminate bonded to Lakepine® MDF or Superfine® Particleboard Group Number Classification: 3

**Formica AR Plus Laminate has good colour retention and dimensional stability in normal interior applications. However, prolonged exposure to sunlight may cause shrinkage and/or some change in colour. Formica AR Plus laminate is therefore not recommended for external applications or interior applications with prolonged exposure to direct sunlight. Formica is no different from any other material in that darker colours, semi-gloss and gloss finishes show scratches and superficial wear and tear more readily than lighter colours and lower gloss surfaces.*

PROPERTIES

(AS/NZSN 2924)

Property	Results
Resistance to Surface Wear:	Initial wear not less than 200 cycles. Average wear not less than 350 cycles
Resistance to Immersion in Boiling Water:	No more than a marked change of gloss and/or colour. Gain on weight of not more than 15%
Resistance to Dry Heat at 160°C:	No more than a moderate change of gloss and/or colour
Resistance to steam:	Marked change of gloss and/or colour
Dimensional Stability:	Dimensional change of not more than 0.7% with grain and 12% across grain
Resistance to Staining:	Reagents Groups 1 and 2 = No visible change. Reagents Groups 3 and 4 = No more than a moderate change of gloss and/or colour
Resistance to Colour Change in Artificial Light*:	Not more than slight colour change in Xenon arc light Minimum 6 on the Blue Wool Scale
Resistance to Cigarette Burns:	No deterioration other than moderate change in gloss and/or moderate brown staining.
Formability:	Not recommended for postforming.

SCUFF RESISTANCE

More than 95% gloss retention after being scrubbed with a 3M Scotch-Brite™ Heavy Duty scouring pad attached to a Sheen Model 903 Wet Abrasion Scrub Tester, using 800 gram applied weight and 30 scrubs.

WHEN SPECIFYING

Surfacing shall be Formica AR Plus laminate as supplied by Laminex New Zealand. Colour/s shall be.....

PROCESSING

Board Substrate

Formica AR Plus should be fully supported when glued. Do not bond directly to plaster, plasterboard or concrete. Check board to ensure there are none of the following faults to either substrate or profile:

1. High spots
2. Bumps
3. Low spots
4. Ridges
5. No surface dust or chips.

It is also generally good practice to pass a sanding block over the back of the laminate and the substrate to smooth and inspect for bumps and dents before proceeding to the next fabrication stage.



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Gluing and Bonding tips

Formica AR Plus is 1.2mm so this thickness minimises telegraphing the high reflective surfaces may have inherent tendency to display undulations. To minimise this effect the following recommendations may assist to provide the best results.

1. Cross linking PVA Gluing (CPVA) System:

CPVA glue is a water based adhesive that when applied to a substrate causes the fiber to swell. Adding heat to the process produces steam, which exacerbates the swelling. Formica AR Plus laminates have a greater tendency to show this swelling/unevenness through to the top of the sheet. Too much glue will amplify unevenness because of the higher water content.

Ensuring that glue is not applied above the required bonding level will reduce the effect; as will maintaining a uniform glue line quality and consistency. Similar to adhering all laminate, the glue line should be evenly applied avoiding lumps of glue, sawdust, and chips.

Reference the adhesive manufacturer's directions. If the glue is not evenly distributed, at the time of pressing, high points can be telegraphed by the gloss surface.

2. Using a Poly Urethane glue (PUR), which contains no water; will provide a better result.
3. Low temperatures and pressures on the press bonding equipment will provide best results. The lower the pressure the better the surface appearance.

It is important to note that for a given press pressure the actual pressure applied to the work piece is dependent on the size of the piece. A large piece will be exposed to less pressure than a smaller piece, if for example the press gauge pressure remains unchanged.

To achieve a consistent finish calculate the pressure requirement vs work piece size for your installed equipment (this information is generally available from the

equipment manufacturer).

Using a flat surface or pad, such as 3mm MDF to press against the decorative surface provides for smoother results.

4. Maintain glue applicators to avoid contamination. Contamination may result in pressing imperfections into laminate surface. Similarly, maintain pressing surfaces free of dints and lumps.
5. Contact glue is generally not recommended for high gloss surfaces.

UNMOUNTED SINKS

Undermounting of sinks in Formica HPL benchtops is not recommended in high wear applications where there is a risk of impact edge damage. The quality of the finished product is dependent on the characteristics of the sink which may telegraph through laminate. Installation is at the discretion of the fabricator.

WALL PANELS

When using Formica HPL in a wall panel application, it is recommended that the laminate is bonded to a high quality substrate, such as Lakepine MDF and balanced by bonding laminate of the same thickness to the rear of the panel to minimise bowing.

PROTECTIVE FILM

Formica AR Plus grade is supplied with a Polyester protective film which provides a protective layer to the high gloss surface for transport and handling.

During film application some small particles may become trapped between the laminate and film. These particles can cause an indentation when the laminate is subjected to press bonding.

It is recommended that the surface is inspected and any specks removed prior to pressing. Consequently the film may be removed and the laminate cleaned prior to pressing and then the finished laminated work piece recovered for delivery to the worksite.

The Polyester film has a shelf life and can be difficult to remove after nine months from application to the laminate, this is the nature of the film.