

NiuBarrier 2400

NiuBarrier is a softwood faced structural panel which is specifically designed as a reflective noise barrier along freeway and rail corridors. Manufactured to AS/NZS2269 NiuBarrier is a high quality structural plywood with reliable structural properties to suit the most demanding applications.

Manufactured from 100% sustainable plantation pine, NiuBarrier utilizes the veneer preservation treatment method to ensure complete protection from termites and fungal decay (rotting). Veneer treatment is the only way to ensure any unsealed cut panels will not decay.

Veneer treatment is where the individual sheets of veneer are preservative treated before being fabricated into plywood to ensure 100% penetration. The treatment veneers are then bonded with a permanent phenolic resin which is often referred to as “A” bond or Marine “A” or Structural Bond.

Structural “A” bonds require rigorous testing after submersion in boiling water for 72 hours or 6 hours under high pressure steam to ensure a high quality bond.

NiuBarrier 2400 General Specification:

Surface Finish	Reeded (Slim line grooves) profile
Sheet length	2400mm with tolerance in accordance with AS/NZS2269 clause 1.6 2700mm (Scarf Joined) with tolerance in accordance with AS/NZS2269 clause 1.6
Sheet width	1200mm with tolerance in accordance with AS/NZS2269 clause 1.6
Sheet Thickness	27mm, 33mm. tolerance +/-1mm
Stress Grade	F14
Approximate Density	600kg/m ³ ;16.2kg/m ² for 27mm; 19.8 kg/m ² for 33mm
Veneer Species	Hoop, Klinki or Caribbean Plantation Pine
Jointing system	Polypropylene tongue
Preservative treatment	ACQ H4 by individual veneer
Bond Type	“A” Bond in accordance with AS/NZS 2098
EWPAA Certificate	Product Certification and PEFC Chain of Custody
Design Life	40 years bond and treatment
Manufacturing standards	AS/NZS 2260-2012 AS/NZS1604.3-2012
Manufactured by	PNG Forest Products. Bulolo PNG

FACE and Back veneer Specification.

Permitted imperfections. The following imperfections shall be permitted subject to the limitations specified.

- Unfilled holes: individually not exceeding 50mm measured across the grain; no limitation
- Knots- sound individually not exceeding 50mm measured across the grain ; no limitation
- Unfilled splits and face edge joints- individually 9mm maximum measured across the grain and half the length of the sheet or 12mm measured across the grain and 600mm long tapering to a pint with a maximum of 2 per sheet end
- Patches- individually not exceeding 75mm measured across the grain; no limitations
- Sloping Grain- not exceeding 1 in 7 if extending through more than one quarter of the sheet area; no limitation if localised in the vicinity of permitted imperfection
- Discolouration and stains- no limitation
- Resin streaks- no limitation
- Glue Bleed through- no limitation
- Roughness- slight roughness associated with localised permitted imperfections and no limitation.

The face and back veneer has a surface finish applied to the veneers which is the Reeded (Slim line grooves) profile.

Sound Transmission Class (STC)

Results would not be dissimilar to tests carried out by the Australian National Acoustic laboratories on similar products.

For example:

- Niubarrier 24mm 14kg/m² – STC26*
- Niubarrier 27mm 14kg/m² – STC26*
- Niubarrier 33mm 18kg/m² – STC27*