

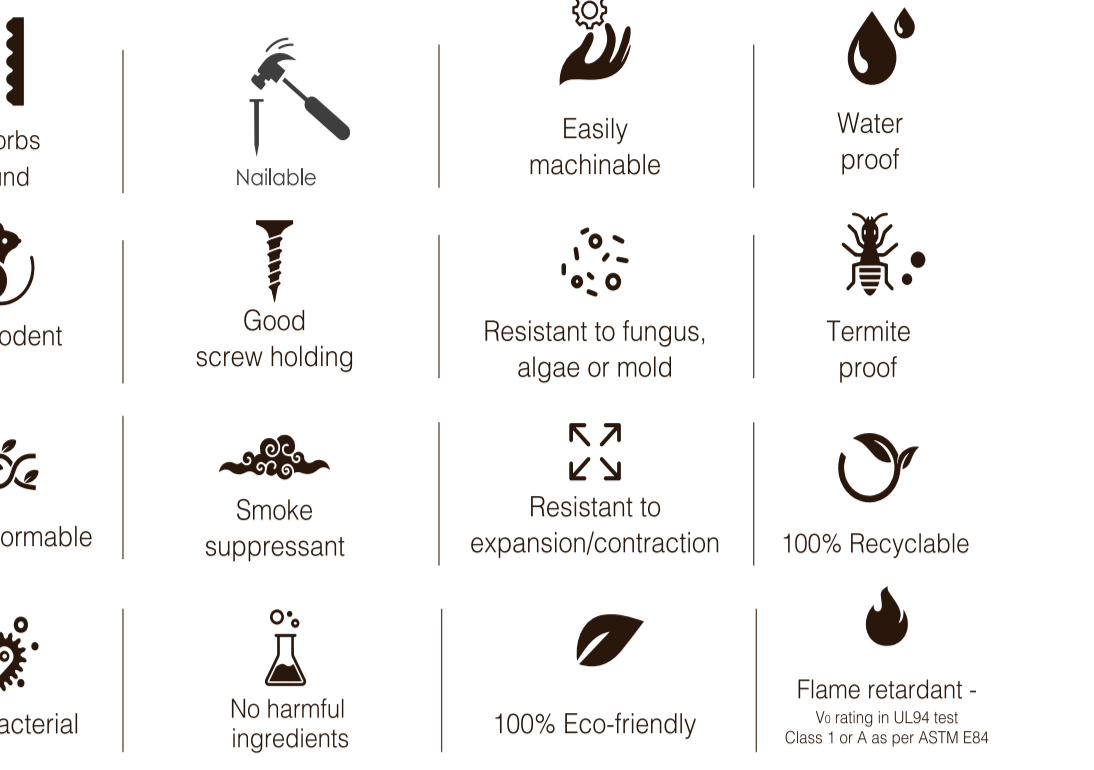
THOMSON FiWOOD

Natural Fibre Board

Substitute for all Wood Working Boards

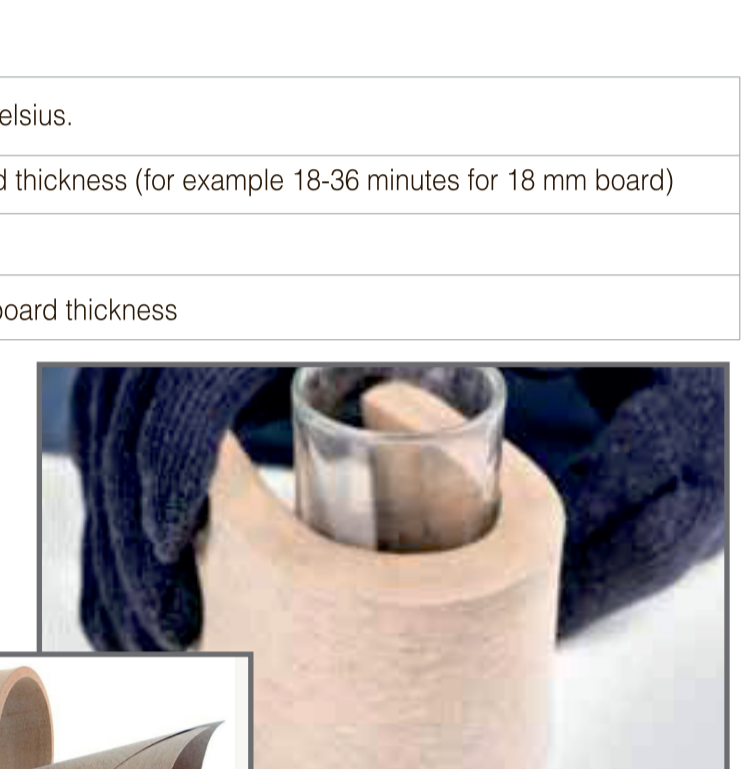
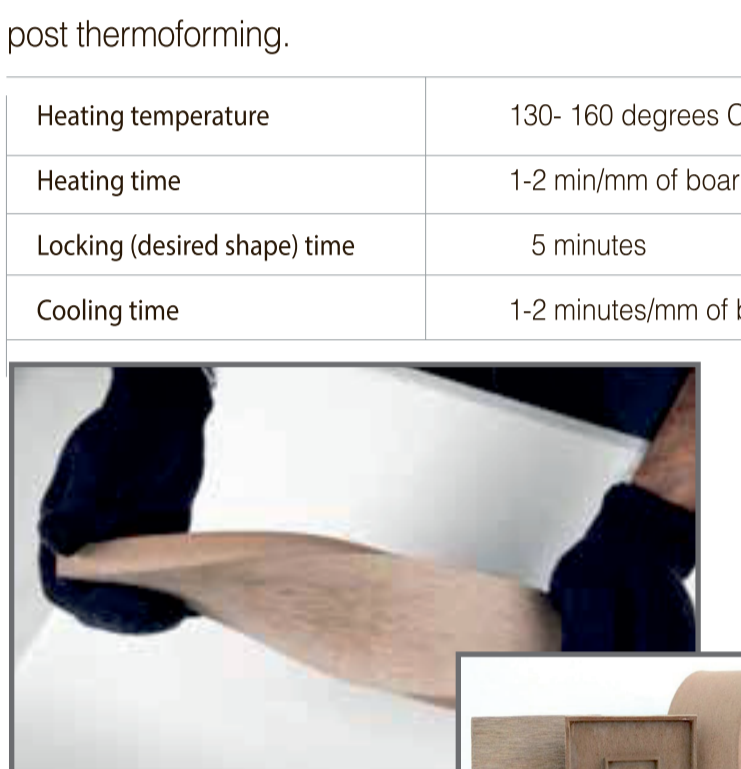
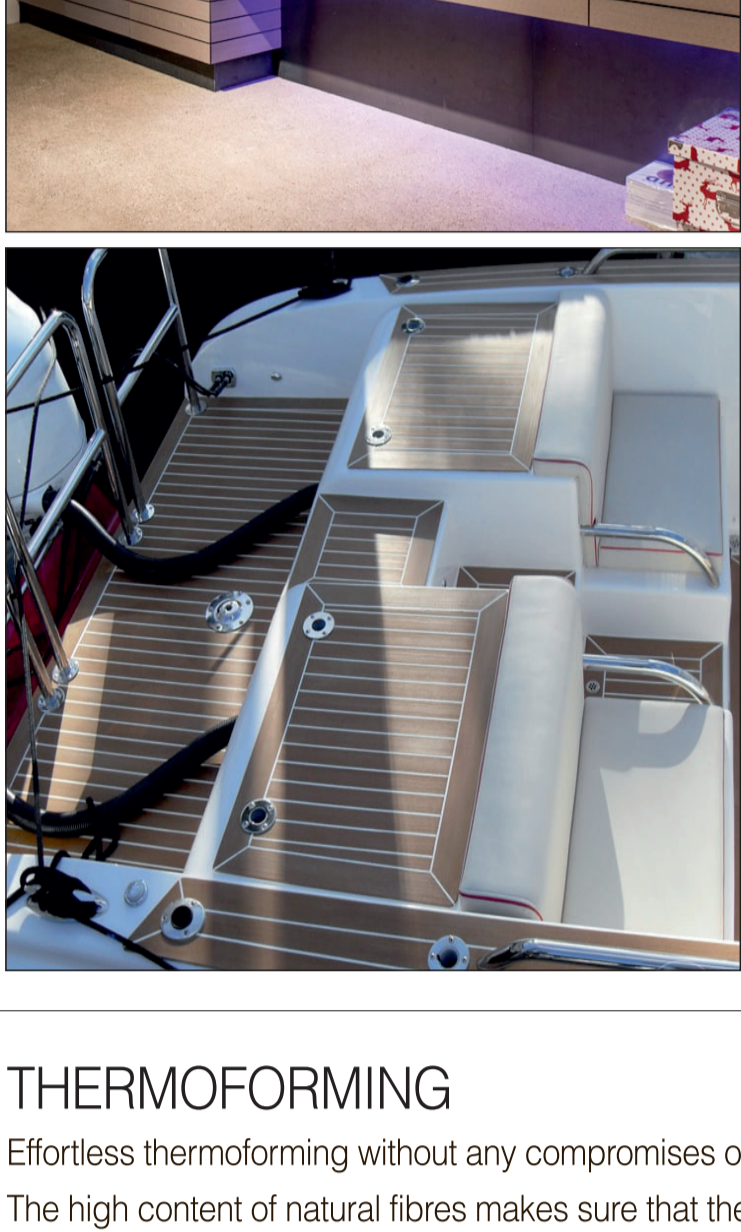


Water & Termite Proof
Can use Nail & Screw
Natural Wood Surface
can Polish & Paint
Interior & Exterior Use



- No formaldehyde emission
- Absorbs Sound
- Nailable
- Easily machinable
- Water proof
- Durable
- Anti rodent
- Good screw holding
- Resistant to fungus, algae or mold
- Termite proof
- UV resistant
- Thermoformable
- Smoke suppressant
- Resistant to expansion/contraction
- 100% Recyclable
- No splintering, no crack
- Anti-bacterial
- No harmful ingredients
- 100% Eco-friendly
- Flame retardant - V0 rating in UL94 test Class 1 or A as per ASTM E84

Termite Proof | Water Proof | Flame Retardant
Easily Machinable | Thermoformable | Eco-friendly & Recyclable



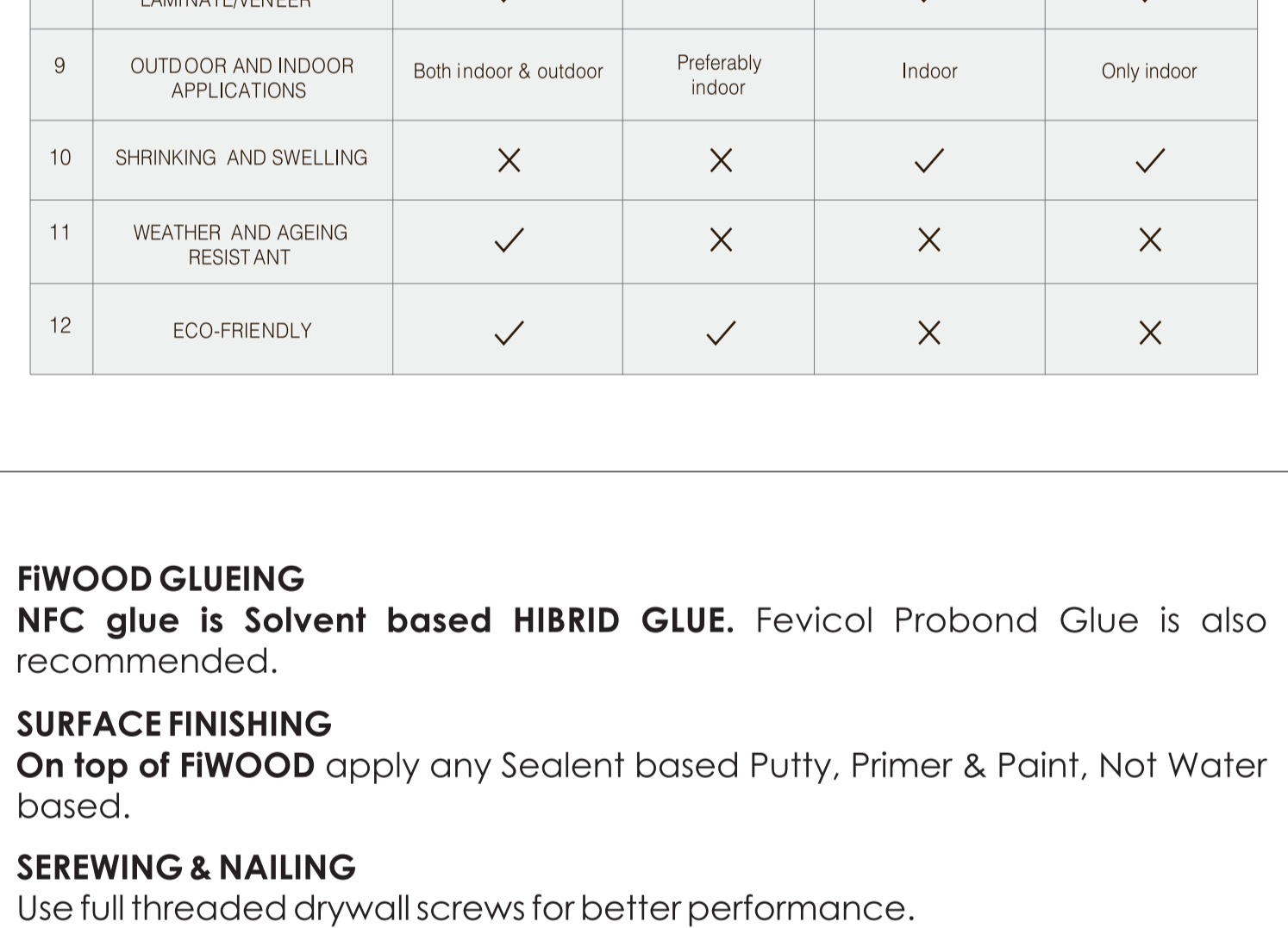
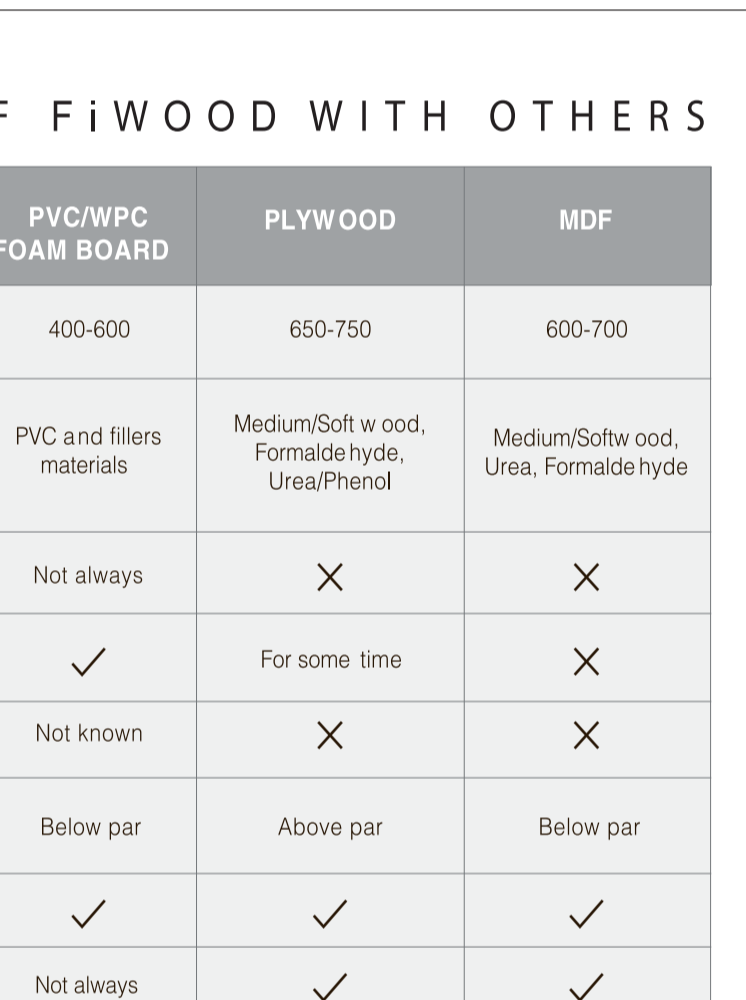
THERMOFORMING

Effortless thermoforming without any compromises on the strength is a unique feature of FiWOOD. The high content of natural fibres makes sure that the density and dimensional stability is uncompromised post thermoforming.

| | |
|------------------------------|---|
| Heating temperature | 130- 160 degrees Celsius. |
| Heating time | 1-2 min/mm of board thickness (for example 18-36 minutes for 18 mm board) |
| Locking (desired shape) time | 5 minutes |
| Cooling time | 1-2 minutes/mm of board thickness |



| TEST | METHOD | LIMIT | RESULT |
|-----------------------|-----------------|------------------------|-------------------|
| FLAMMABILITY | UL94 | | V0 Rating |
| FLAME SPREAD INDEX | ASTM E84 : 2020 | 0 – 25 CLASS 1 OR A | 6 CLASS 1 OR A |
| SMOKE DEVELOPED INDEX | ASTM E84 : 2020 | 450 | 100 |



COMPARITIVE STUDY OF FiWOOD WITH OTHERS

| NO | PROPERTIES | FIWOOD | PVC/WPC FOAM BOARD | PLYWOOD | MDF |
|----|---------------------------------|-----------------------------------|---------------------------|---|--------------------------------------|
| 1 | DENSITY (KG/CBM) | 700-800 | 400-600 | 650-750 | 600-700 |
| 2 | RAW MATERIALS | Natural fibres and Thermoplastics | PVC and fillers materials | Medium/Soft wood, Formaldehyde, Urea/Phenol | Medium/Soft wood, Urea, Formaldehyde |
| 3 | TERMITE PROOF | ✓ | Not always | ✗ | ✗ |
| 4 | WATER PROOF | ✓ | ✓ | For some time | ✗ |
| 5 | FLAME RESISTANT | ✓ | Not known | ✗ | ✗ |
| 6 | SCREW HOLDING | Above par | Below par | Above par | Below par |
| 7 | CONVENTIONAL TOOLS | ✓ | ✓ | ✓ | ✓ |
| 8 | OVERLAY LAMINATE/VENEER | ✓ | Not always | ✓ | ✓ |
| 9 | OUTDOOR AND INDOOR APPLICATIONS | Both indoor & outdoor | Preferably indoor | Indoor | Only indoor |
| 10 | SHRINKING AND SWELLING | ✗ | ✗ | ✓ | ✓ |
| 11 | WEATHER AND AGEING RESISTANT | ✓ | ✗ | ✗ | ✗ |
| 12 | ECO-FRIENDLY | ✓ | ✓ | ✗ | ✗ |

FIWOOD GLUEING

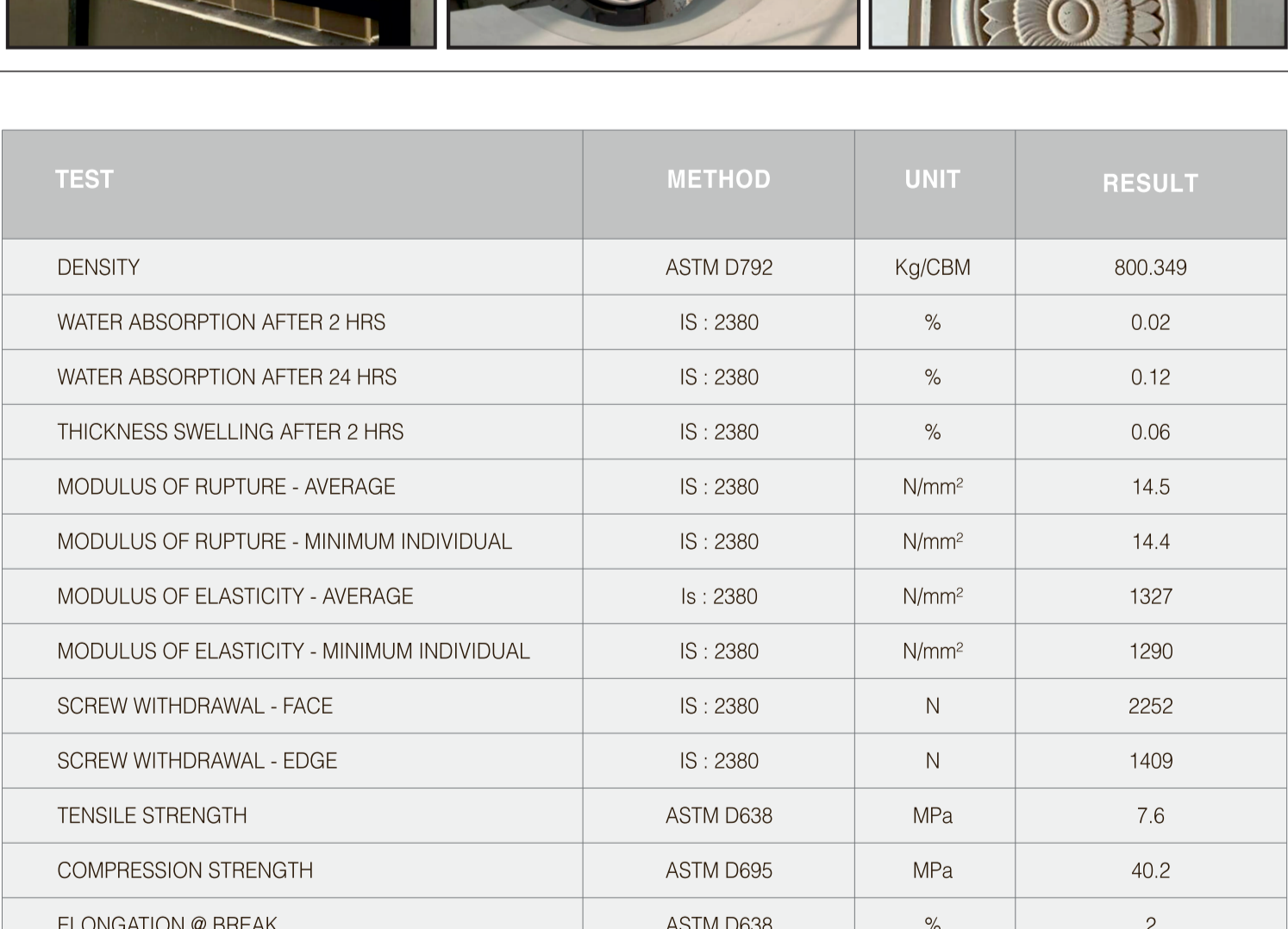
NFC glue is Solvent based HIBRID GLUE. Fevicol Probond Glue is also recommended.

SURFACE FINISHING

On top of FiWOOD apply any Sealant based Putty, Primer & Paint, Not Water based.

SEREWING & NAILING

Use full threaded drywall screws for better performance.



| TEST | METHOD | UNIT | RESULT |
|--|-----------------------|-------------------|---------------------------|
| DENSITY | ASTM D792 | Kg/CBM | 800.349 |
| WATER ABSORPTION AFTER 2 HRS | IS : 2380 | % | 0.02 |
| WATER ABSORPTION AFTER 24 HRS | IS : 2380 | % | 0.12 |
| THICKNESS SWELLING AFTER 2 HRS | IS : 2380 | % | 0.06 |
| MODULUS OF RUPTURE - AVERAGE | IS : 2380 | N/mm ² | 14.5 |
| MODULUS OF RUPTURE - MINIMUM INDIVIDUAL | IS : 2380 | N/mm ² | 14.4 |
| MODULUS OF ELASTICITY - AVERAGE | IS : 2380 | N/mm ² | 1327 |
| MODULUS OF ELASTICITY - MINIMUM INDIVIDUAL | IS : 2380 | N/mm ² | 1290 |
| SCREW WITHDRAWAL - FACE | IS : 2380 | N | 2252 |
| SCREW WITHDRAWAL - EDGE | IS : 2380 | N | 1409 |
| TENSILE STRENGTH | ASTM D638 | MPa | 7.6 |
| COMPRESSION STRENGTH | ASTM D695 | MPa | 40.2 |
| ELONGATION @ BREAK | ASTM D638 | % | 2 |
| CHARPPY IMPACT STRENGTH | ASTM D6110 | KJ/m ² | 6.25 |
| HEAT DEFLECTION @ 0.45MPa | ASTM D648 | °C | 64.45 |
| SOFTENING TEMPERATURE @ 1 KG | ASTM D 1525 | °C | 72.5 |
| VOC EMISSIONS | EPA : 5035A (by GCMS) | Mg/KG | Below detectable limit |
| TEST FOR TERMITE RESISTANCE | IS 4833 | | No sign of termite attack |
| TEST FOR FUNGAL RESISTANCE | IS 4873 | | No sign of fungal attack |
| TEST FOR BOHRER RESISTANCE | IS 4873 | | No sign of bohrer attack |

Available dimensions: FiWOOD Boards are generally available in 8' X 4' - 6mm, 8mm, 12mm, 15mm, 18mm, 20mm, 25mm However customised dimensions are available in any size and thickness. Density may vary by 5%. Please check with us for further details.

• Suggested glue: Fevicol Probond • NFC-GLU • For seamless joinery – apply glue on the edges



Save Trees & Go Green

മരം ഒരറ്റ വരും! മരം തുറന്നുകൊടുത്ത്..!
FIWOOD ഉള്ളേക്കാം.