

Norbord Core Stock Panels
Norbord Inc.

PR-N801

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Products: Norbord Core Stock Panels

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1. Basis of the product report:
 - Performance Standard for Wood-Based Structural-Use Panels, PS 2-10
 - ISO 12460-4, Wood-Based Panels - Determination of Formaldehyde Release, Part 4: Desiccator Method
 - APA Report T2014P-24 and other qualification data
2. Product description:

Norbord core stock is a strand based product composed of wood strands (pre-dominantly Aspen / Poplar species) bonded together utilizing heat, pressure and adhesives (Phenolic Formaldehyde and/or Polymeric Diphenylmethane Diisocyanate, pMDI), and is trademarked as Shun Xin Ban (顺芯板) by Dehua TB New Decoration Material Co., Ltd. in China. The core stock panel is available in thicknesses ranging from 9 to 18 mm. The common size is 1,220 mm by 2,440 mm, but other custom sizes can be produced, depending on mill capabilities. The product is produced at Norbord's High Level OSB plant in Alberta, Canada, and is suitable for use as a substrate for veneer lamination. The product (with or without wood veneer or wood veneer-melamine paper overlay) is designed for non-structural interior decoration applications such as decorative panels, wardrobes, entertainment centers, book shelves..., etc. However, this product is not approved for use as structural sheathing for wood or timber frame construction.
3. Design properties:

Norbord core stock panels meet the properties shown in Tables 1 through 3.
4. Product installation:

Since Norbord core stock recognized in this report may be used as a substrate for veneer lamination, the product installation recommendations depend on the finished product and shall be obtained from the finished product manufacturer.
5. Limitations:
 - a) Norbord core stock is limited for use in interior applications consistent with the recommendations provided by the manufacturer.
 - b) Norbord core stock recognized in this report is limited to thicknesses ranging from 9 to 18 mm.
 - c) Norbord core stock is not approved for use as structural sheathing for wood or timber frame construction.
 - d) Norbord core stock is produced by Norbord Inc. at the Norbord facilities in High Level, Alberta, Canada under a quality assurance program audited by APA.
 - e) This report is subject to re-examination in one year.
6. Identification:

Norbord core stock panels described in this report are identified by a label or stamp bearing the manufacturer's name and/or trademark (Norbord), the APA assigned plant number (540), the product thickness, the APA logo, the report number PR-N801, and a means of identifying the date of manufacture.

Table 1. General properties for Norbord core stock panels

Description	Specification
Thickness (unsanded) Tolerances	Nominal Thickness -0 mm or +1.3 mm
Length and Width Tolerances	Nominal Dimension ± 3 mm
Length and Width Straightness Tolerances	± 1.5 mm/m
Squareness	± 2.0 mm/m
Moisture Content Range	2% to 12%
Formaldehyde ^(a)	≤ 0.20 mg/l (average) ≤ 0.30 mg/l (individual specimen)

For imperial Units: 1 mm = 0.0394 in.

^(a) Based on the ISO 12460-4 Desiccator Method.

Table 2. Mean and minimum properties for Norbord core stock panels

Property	Mean	Minimum ^(a)
Internal Bond, MPa	0.30	0.18
Modulus of Elasticity (parallel), MPa	3,500	NA
Modulus of Elasticity (perpendicular), MPa	1,400	NA
Modulus of Rupture (parallel), MPa	22	17.6 ^(b)
Modulus of Rupture (perpendicular), MPa	11	8.8 ^(b)

For Imperial Units: 1 MPa = 145.04 psi

^(a) 5th percentile with 75% confidence.

^(b) 80% of the mean value.

Table 3. Mean and maximum thickness swell for Norbord core stock panels

Panel Thickness, mm	Mean Thickness Swell, %	Maximum ^(a) Thickness Swell, %
9	25	30
12	22	26
15	18	22
16	17	21
18	15	18

^(a) 95th percentile with 75% confidence.

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APA – THE ENGINEERED WOOD ASSOCIATION

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