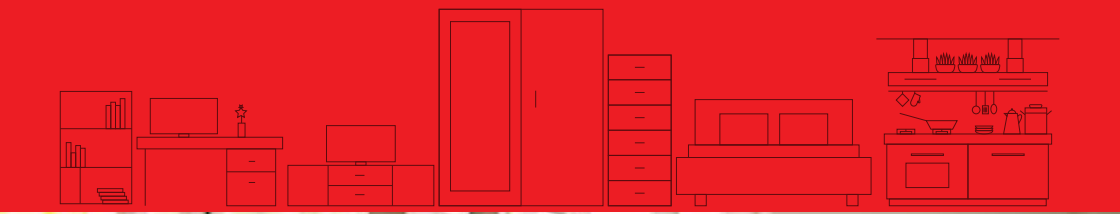
CENTURYPROWUD

USER MANUAL



Content

CENTURYPROWUD

WORLD-CLASS WOOD SOLUTIONS.

After the industrial revolution and the population explosion, the planet's forests have been shrinking at a rapid pace. The forests that turn globe-warming CO_2 into life-giving oxygen are disappearing because of our desire for natural materials like wood. It's time to work with a better alternative.

The world has moved to environment-friendly wood solutions like MDF and Particle Board manufactured with advanced technology and excellent aesthetics.

And now you can too! Century Prowud MDF and Particle Board offers you quality that matches international standards of performance, durability, and aesthetics to open up creative possibilities like never before.
So go ahead and think as big as the world does.

CENTURYPROWUD

Versatile
Greater formability

Smart
Superior technical features

Beautiful
Wide range of shades

FSP FIRE FUNGUS TERMITE BORER MOISTURE RESISTANT HIGHER DENSITY PREMIUM BOARD

LOWER EMISSION PREMIUM PLUS
Higher Density High Moisture Resistant Premium Boards

DWR Densified Water Resistant MDF

DIR Densified Interior MDF

Artz DESIGNER EMBOSSED MDF

CENTURY PROWUD MDF

WOOD SOLUTIONS FOR THE NEXT GENERATION

Century Prowud MDF is a revolutionary product which consists of a wide range of high quality engineered wood substitutes. It meets the evolving demands of modern consumers by being:

Versatile: Century Prowud MDF is carefully engineered to make precise routing, machining, and finishing possible. The product provides chipping-free edges, and can easily be carved and moulded. This makes Century Prowud MDF highly versatile and suitable for specialized applications requiring unique shapes or intricate designs. When it comes to designing furniture or other interior elements, now the only limit is your imagination.

Smart: Century Prowud MDF comes packed with superior technical features which provide strength and durability even under harsh conditions. Each board is constructed with Scalper Technology and quality checked at 128 individual points. This ensures uniform and high density, smoothness and routing grade quality, and resistance to adverse environments and pests. Our products are accredited by the Indian Green Building Council.

Beautiful: Century Prowud MDF provides both strength and beauty. Ultra smooth surfaces make them perfect for painting, polishing and providing high gloss. The smoothness also makes them the perfect substrate for laminates and veneers. Pre-laminated boards, backed by the wide range of Century Laminates, provide choices in terms of colours and designs which help our customers to express their creativity freely. Century Prowud MDF enables interiors, which can be aesthetically tailored to individual choice.

CARB PHASE 2 COMPLIANT | E1 GRADE COMPLIANT | LOW FORMALDEHYDE EMISSION | TSCA Title VI | IS 12406 CM/L-9700098221 | IS 14587 CM/L-9700100913 | Indian Green Building Council | SUPERIOR QUALITY | Environment friendly | FSC www.fsc.org FSC® C143057 The mark of responsible forestry

FSC® - certified products available upon request

FIRE
FUNGUS
TERMITE
BORER
MOISTURE
RESISTANT
HIGHER DENSITY
PREMIUM BOARD

Conforms to:
ASTM E84-2021
Class 1

The Ultimate Defender

Introducing Fire Smart Panel, the ultimate defender of your furniture and interiors. Our cutting-edge boards combine unrivalled strength with exceptional fire resistance, ensuring your safety and peace of mind. It not only protects from the entry of borers and termites like a true and fearless defender, it also combats moisture and fire to give exceptional durability and performance to your furniture and interiors in any environment.

10 Reasons
WHY YOU SHOULD USE FIRE SMART PANEL

1. Fire & moisture resistant
2. Borer and termite resistant
3. Resistant to fungus and stains
4. Lower emission, compliant to E1 grade
5. Environment-friendly
6. A wide range of shades in pastels, textiles and wood grains
7. Excellent machinability
8. High screw holding strength and load bearing capacity
9. Free from warping and surface defects
10. Bacteria-free surface due to Silver Nano Technology

Fire Smart Panel Range
Standard Size: 8ft x 4ft (2440mm x 1220mm); Other variants available as per specifications

Thickness (in millimetres)
5.50, 8.00, 12.00, 16.75, 18.00

Variants: Plain & Prelam (5.5 mm & above)

E1 GRADE COMPLIANT | 10 YEAR WARRANTY

LOWER EMISSION PREMIUM PLUS

HIGH DENSITY HIGH MOISTURE RESISTANT PREMIUM BOARDS

MORE THAN WOOD

LOOKS JUST AS GOOD

The healthier solution for all your furniture and interior needs. The latest Lower Emission Premium Plus is made with higher density and fulfills almost every criterion a customer could ask for - it's borer, termite, and fungus resistant, high moisture resistant, and healthy. Exuding a lesser amount of formaldehyde fumes into the environment and our home, the new Lower Emission Premium Plus is a healthy alternative to wood and confirms E1 grade standards. Lower Emission Premium Plus even has the confidence to offer an unparalleled 5-Year warranty on it.

Perfect for creating durable furniture of all shapes and sizes and stunning interiors of every design, the Lower Emission Premium Plus is available in all thicknesses of Pre-laminated and Plain Premium Plus. As a pre-laminated board, Century Prowud Lower Emission Premium Plus also offers a fabulous array of aesthetic choices. Pre-laminated boards, backed by a wide range of Century Laminates decors, provide great choices in terms of colours and designs.

LOWER EMISSION PREMIUM PLUS High density, high moisture resistance & highly versatile, Lower Emission Premium Plus is suitable for specialized applications requiring unique shapes or intricate designs. Its chipping-free edges can be easily carved or molded. Its superior technical features provide strength & durability even under harsh conditions. Each board is quality checked at 128 individual points and comes with the assurance of uniform and high density, smoothness, and resistance to adverse environments.

The ultra-smooth surfaces are perfect for painting, polishing, and providing a high gloss finish. The smoothness also makes it the ideal substrate for laminates and veneers.

The Indian Green Building Council also accredits Lower Emission Premium Plus.

Lower Emission Premium Plus Range

Standard Size: 8ft x 4ft (2440mm x 1220mm); Other variants available as per specifications

Thickness (in millimetres)

3.0, 5.50, 8.0, 12.0, 16.0, 16.75, 18.0, 25.0

Variants: Plain & Prelam (5.5 mm & above)

*Range: One-side laminated (OSL), Both-side laminated (BSL), One-side Bare (OSB), Both-side Balancing (BSB)

Finishes: Suede and Matt

E1 GRADE COMPLIANT

TSCA Title VI

IS 12406 CM/L-9700098221

IS 14587 CM/L-9700100913

Indian Green Building Council

Environment friendly

SUPERIOR QUALITY

FSC® - certified products available upon request

DWR Densified Water Resistant MDF | DIR Densified Interior MDF

PERFORMANCE THAT WOOD WOULD ENVY

Century Prowud MDF has a homogenous internal structure with a super smooth surface. They are made with Scalper Technology and quality checked at 128 points to ensure that there is no warping, cracking, splitting, or knots.

Century Prowud MDF offers a wide range of MDF panels in different grades and a variety of sizes/thicknesses. It's available in both plain and pre-laminated variants.

DIFFERENT GRADES FOR DIVERSE NEEDS

The boards are available in two grades:

DWR (IS Grade I): Its densified structure is forged with moisture fighting properties which make it suitable for varied and prolonged application in humid conditions.

DIR (IS Grade II): Super grade range for diverse applications in the interiors.

Both the grades are available in two variants – Plain and Pre-laminated

DWR Range (Grade-I)
Standard Size: 8ft x 4ft (2440mm x 1220mm); Other variants available as per specifications

Thickness (in millimetres)
3.30, 5.50, 7.50, 11.0, 16.50, 17.0, 18.0, 22.0, 25.0

Variants: Plain & Prelam (5.5 mm & above)

DIR Range (Grade-II)
Standard Size: 8ft x 4ft (2440mm x 1220mm); Other variants available as per specifications

Thickness (in millimetres)
1.90, 2.10, 3.30, 4.0, 4.60, 5.50, 7.0, 7.50, 9.75, 11.0, 14.50, 16.50, 17.0, 18.0, 25.0, 30.0

Variants: Plain & Prelam (5.5 mm & above)

Range: One-side laminated (OSL), Both-side laminated (BSL), One-side Bare (OSB), Both-side Balancing (BSB)

Finishes: Suede and Matt

Artz
DESIGNER EMBOSSED MDF

You'll want to touch it to believe it! That's the irresistible power of the new Artz range from Century Prowud. The range's impressive looks are certain to grab the attention of whoever sets their eyes on it.

Century Prowud ARTZ panels are made with the latest technology available worldwide, using the best quality plates, which give sharp edges to the embossed design and a glossy-smooth finish to the surface. These embossed panels are perfect for multiple applications and can easily be pasted or fixed on any substrate.

Available in a wide range of designs, all you need to do to highlight the texture is a simple two-tone polish with stain and lacquer. Alternately, you could also create stunning effects by polishing, painting, membrane pressing, or a finish of your choice on them.

Artz Range

Standard Size: 8ft (2440mm) x 4ft (1220mm); Other variants available as per specifications

Thickness (in millimetres): 2.3mm

Available in: Raw Unpolished

Polish Type: DUCO Finish / Dual Tone with Antique Effect / PU Finish

Fixing: Fix as Veneer

Applications: Wall / Ceiling Cladding, Shutter Cladding and Furniture Embellishments

APPLICATION AREAS

Century Prowud MDF is the wood solution when you want to create things differently. Its technical superiority gives you the freedom to redefine your spaces exactly as you wish. Therefore, these boards find a wide range of applications:

Building Construction: Partitions, Ceilings, Door Panels, Moulding, Pelmets, Skirting, etc.

Furniture: Homes, Offices, Hotels, Schools, Hospitals, Colleges, Shopping Malls, Educational Institutions, etc.

Industrial Applications: Laminate Substrates, Scientific Instruments, Musical Instruments, Stationery Items, Office Equipments, Speaker Boxes, TV Cabinets, Fridges, Sewing Machine Tops, Packaging, Shoe Heels, Toys, Sports Goods, Cut-outs, Photo Lamination, Moulds and Dies, Clocks, Trophies, Interiors of Buses and Rail Coaches, etc.

Handicrafts: Sculptures, Decorative Items, Artefacts, etc.

Other Applications: False Ceilings, Modular Kitchens, Short Cycle Press, Exhibition Sets, Aluminum Frame Doors, Packaging and Pallets, Photo Lamination, Photo Frames, Writing Boards and Exam Boards, etc.

PERFORMANCE CHARACTERISTICS

- 5 Year Warranty*
- High Moisture Resistance
- Long Lasting & Value for Money
- Special Ingredients for Toughness
- Specially Developed for Indian Conditions
- Uniform & Higher Density
- Super Smooth & Paintable
- Borer, Termite & Fungus Resistant
- Vast Range of Prelam Decor

The world-class **MDF**

Now comes with

VIROKILL

Kills 99.99% Viruses

*T&C Apply. Virokill feature is available only on Prelam MDF and Prelam Particle Board.

PHYSICAL & MECHANICAL PROPERTIES

CENTURYPROWUD
MDF-The wood of the future

Specifications and Standards

Plain MDF Boards

S. No.	Properties	Unit	IS 12406 Grade I DWR	IS 12406 Grade II DIR	Grade I Premium Plus
1	Length & Width Tolerance	mm/meter	±3.0	±3.0	±3.0
2	Thickness Tolerance	mm	±0.30	±0.30	±0.30
3	Squareness & Edge Straightness Tolerance	mm/meter	2.0	2.0	2.0
4	Density	Kg/m^3	600-900	600-900	850-870
5	Variation from Mean Density	%	±10	±10	±10
6	Moisture Content	%	5 to 10	5 to 10	4 to 8
7	Variation from Mean Moisture Content (Absolute)	%	±3	±3	±3
8	Water Absorption (Maximum)	%			
	a) After 2 Hours Soaking		6.0	9.0	5 (≤8 mm) 3.75 (>8 mm)
	b) After 24 Hours Soaking				12 (≤8 mm) 11 (>8 mm)
	i. Up to 6.0 mm thickness		30.0	45.0	
	ii. 7.0-12.0 mm thickness		20.0	30.0	
	iii. 13.0-19.0 mm thickness		13.0	20.0	
	iv. Above 20.0 mm thickness		12.0	18.0	
9	Linear Expansion (Swelling in Water) (Maximum)	%			
	(a) Due to General Absorption (24 Hours Soaking)				
	i. Thickness		7.0	10.0	4.0
	ii. Length and Width		0.3	0.4	0.3
	(b) Due to Surface Absorption				
	i. Thickness after 2 Hours Soaking		4.0	5.0	2.0
10	Modulus of Rupture (Minimum)	N/mm^2			
	(a) Up to 20.0 mm				
	i. Average		28.0	28.0	35
	ii. Minimum		25.0	25.0	32
	(b) Above 20.0 mm				
	i Average		25.0	25.0	NA
	ii. Minimum		22.0	22.0	NA
11	Modulus of Elasticity (Minimum)	N/mm^2			
	(a) Up to 20.0 mm				
	i. Average		2800	2800	3200
	ii. Minimum		2500	2500	3000
	(b) Above 20.0 mm				
	i. Average		2500	2500	NA
	ii. Minimum		2300	2300	NA
12	Tensile Strength Perpendicular to Surface (IB)	N/mm^2			
	(a) Up to 20.0 mm				
	i. Average		0.90	0.80	1.20
	ii. Minimum		0.80	0.70	1.00
	(b) Above 20.0 mm				
	i. Average		0.80	0.70	NA
	ii. Minimum		0.70	0.60	NA
13	Tensile Strength Perpendicular to Surface (IB)	N/mm^2			
	(a) After Cyclic Test				
	i. Average		0.45	NA	NA
	ii. Minimum		0.40	NA	NA
	(b) After Accelerated Water Resistance Test				
	i. Average		0.30	NA	0.30
	ii. Minimum		0.25	NA	0.25
14	Screw Withdrawal Strength	N			
	Face		1500	1500	2000
	Edge (for thickness>12.0 mm)		1250	1250	1500

*NA- Not applicable

PHYSICAL & MECHANICAL PROPERTIES

CENTURYPROWUD
MDF-The wood of the future

Specifications and Standards

Prelaminated MDF Boards

S. No.	Properties	Unit	IS 14587 Grade I DWR	IS 14587 Grade II DIR	Grade I Premium Plus
1	Length & Width tolerance	mm/meter	±3.0	±3.0	±3.0
2	Thickness tolerance	mm	±0.30	±0.30	±0.30
3	Squareness & Edge Straightness Tolerance	mm/meter	2.0	2.0	2.0
4	Density	Kg/m^3	-	-	850-870
5	Variation from Mean Density	%	±10	±10	±10
6	Moisture Content	%	-	-	4 to 8
7	Variation from Mean Moisture Content (Absolute)	%	-	-	±3
8	Water Absorption (Maximum)	%			
	a) After 2 Hours Soaking		6.0	9.0	5 (≤8 mm) 3.75 (>8 mm)
	b) After 24 Hours Soaking		12.0	18.0	12 (≤8 mm) 11 (>8 mm)
9	Modulus of Rupture (Minimum)	N/mm^2			
	(a) Up to 20.0 mm				
	i. Average		28.0	28.0	35
	ii. Minimum		25.0	25.0	32
	(b) Above 20.0 mm				
	i. Average		25.0	25.0	NA
	ii. Minimum		22.0	22.0	NA
10	Modulus of Elasticity (Minimum)	N/mm^2			
	(a) Up to 20.0 mm				
	i. Average		2800	2800	3200
	ii. Minimum		2500	2500	3000
	(b) Above 20.0 mm				
	i. Average		2500	2500	NA
	ii. Minimum		2300	2300	NA
11	Tensile Strength Perpendicular to Surface (IB)	N/mm^2			
	(a) Up to 20.0 mm				
	i. Average		0.90	0.80	1.20
	ii. Minimum		0.80	0.70	1.00
	(b) Above 20.0 mm				
	i. Average		0.80	0.70	NA
	ii. Minimum		0.70	0.60	NA
12	Tensile Strength Perpendicular to Surface (IB)	N/mm^2			
	(a) After Cyclic Test				
	i. Average		0.45	NA	NA
	i. Minimum		0.40	NA	NA
	(b) After Accelerated Water Resistance Test				
	i. Average		0.30	NA	0.30
	ii. Minimum		0.25	NA	0.25
13	Screw Withdrawal Strength	N			
	Face		1500	1500	2000
	Edge (for thick>12.0 mm)		1250	1250	1500
14	Abrasion Resistance, Type II	Revolutions	450	450	450
15	Resistance to Steam Surface Finish. There may be Slight Color Change		No sign of blister, delamination or change in dark colors/patterns.		
16	Resistance to Crack		No sign of cracks or delamination.		
17	Resistance to Stain		No stain on the specimen after cleaning with water, solvent or detergent.		
18	Resistance to Cigarette Burn		No mark or stain on the specimen after cleaning with water or solvent.		

*NA- Not applicable

CENTURY PROWUD MDF BOARDS

HOW TO STORE, HANDLE AND USE

Our MDF is very durable with high resistance to adverse environments. With proper care, this product gives unmatched durability.

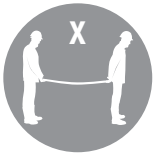
Storage and Handling

The homogeneous construction of Century Prowud MDF provides smooth, flat surfaces. Proper storage and handling procedures are required to maintain this inherent flatness.

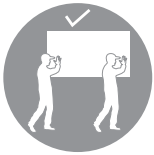
1. Always store the boards away from open windows and doors. Avoid direct sunlight falling on the boards to prevent colour fading & dryness.
2. The storage area should be dry, well ventilated and neat & clean. Maintain a relative humidity of 65+5% to ensure moisture content of 6 to 8 % in MDF panels.
3. The panel lot should be wrapped with a plastic sheet in extremely dry or damp conditions. Extra dryness causes shrinkage, surface deterioration, and warpage. Excess moisture absorption will cause thickness swelling & weaken internal bonding.
4. Do not store boards directly on floors or wet surfaces. Should keep the boards clear off the ground by using dry battens.
5. The length of battens should be the same as the width of the MDF board. For example, for 6 feet wide board, use 6 feet long battens.
6. MDF should ideally be stored flat on a level floor. In case the flooring is uneven, the batten should be sized accordingly.
7. Proper alignment and equal spacing of battens are important.
8. Never slide boards one over the other to prevent surface damage.
9. Keep the edges of stacked panels aligned to avoid the damage caused by bumping against edges or corners.
10. To limit the adverse effect of varying ambient conditions, one or two scrap panels should be placed on top of the stacks during processing or for prolonged storage periods.

Conditioning

Conditioning of boards is desirable for stabilized dimensions and better results. Due to variation in climatic conditions, a period of 48-72 hours at the site, prior to use, is recommended.



Carrying the board horizontally can cause warping.



Boards should always be carried edgewise to avoid warping.

Vertical storage is not recommended.

When stacking vertically, provide support and ensure that the gap between boards is uniform.

When storing horizontally, do not place battens arbitrarily.

Minimum 4-5 battens should be provided at maximum spacing of 50 times of the thickness of the boards, but not exceeding 800 mm distance, center to center.

WORKING ON CENTURY PROWUD MDF BOARDS

Century Prowud MDF is the quick and easy solution to evolving needs. By observing the following points, working with these boards becomes more efficient.

Use fine-toothed saw.

Use carbide tipped TCT machine saws for longer life of cutting tools.

Holding the saw incorrectly during Sawing can chip or damage the board.

Keep low angle for cutting.

CUTTING AND SAWING

Saws to be used

Hand Saw: Century Prowud MDF can be cut using a normal saw, fine-toothed saw is recommended.

Machine Saw: The presence of synthetic resin binder makes Century Prowud MDF is slightly more abrasive than common natural wood, hence the use of TCT (Tungsten Carbide Tip) saws with a minimum of 80-90 teeth is recommended for longer life of cutting tools.

Saw speed can be calculated as:
RPM = Rim speed x 60/Saw diameter x 3.14
The minimum recommended cutter speed should be 3600 rpm

Working with Machine Saw

To ensure a smooth cut, take the following precautions:

- Keep the blade around 10 mm above the board. Low blade projection can chip or damage the board
- If the board is to be chipped from the underside, lower the blade projection
- Keep the board moving to prevent the build-up of heat
- Ensure the board is pressed down firmly against the cutting table to avoid vibration, rough cutting, and chipping edges

Always cut pre-laminated boards along the scouring line.

Scouring line for sawing Pre-laminated boards

Scouring line should be chiselled before cutting, to avoid chipping while sawing pre-laminated boards.

Note: Non adherence to the above may result in poorly finished edges due to edge chipping and removal of core fibers.

Do not hammer screws

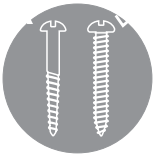
The fully threaded screw should be drilled and screwed into the panel after drill the pilot hole

Screwing

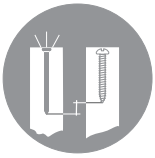
For better result and durability, only screwing is recommended with Century Prowud MDF. Follow usage of guidelines maintained here while using screws with Century Prowud MDF.

Screws

Only fully threaded parallel shank steel screws of proper size should be used (reference may also be made of IS: 7170)



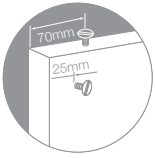
Use only fully threaded parallel shank steel screws



Drill pilot hole to avoid splitting. Depth of the hole should be 2-3 mm more than the length of the screw

Board thickness in mm	Maximum screw gauge
8 & 9	4
12	6
17 & 18	8
25 and above	10

Screw Gauge	Pilot hold diameter
4	2 mm
6	2.5 mm
8	3 mm
10	3.5 mm



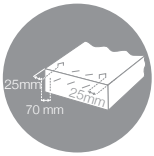
Minimum distance from corner on surface and edges: 25 mm & 70 mm respectively

Use plastic sleeve to ensure better grip at the hinges

Placement and Fixing

Distance of screws from corner on surface and edges should be minimum 25 mm and 70 mm respectively.

If screws are to be repeatedly removed and fixed as in kitchen shutters, the use of plastic or metal sleeves are recommended.



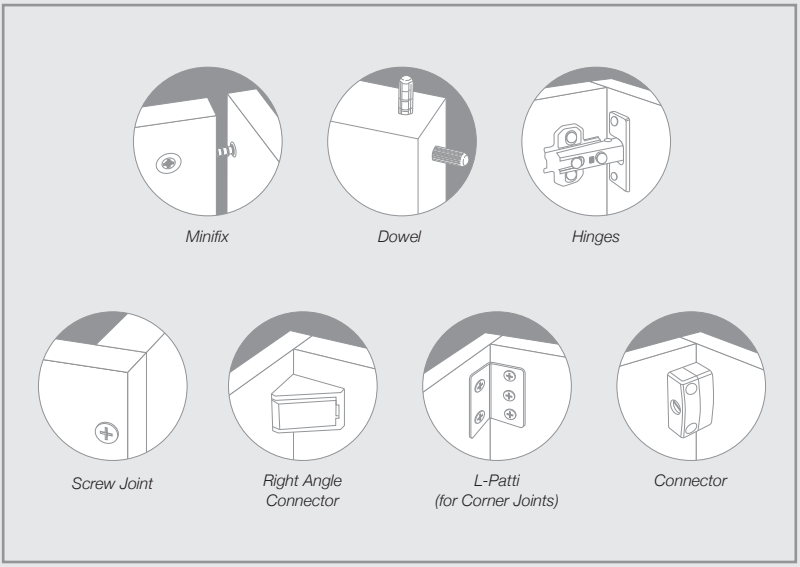
Distance from corner on surface and edges should be minimum 25 mm and 70 mm respectively.

Nailing / Stapling

Nailing can be done for applications like upholstery, fixing of beading, moulding etc. The nails should not be thicker than 17 gauge. When stapling, it is important to control the air pressure so that the top of the staple is just below the surface to achieve the best holding power. Distance of the nails/staples from corner of surfaces and edges should be minimum 25 mm and 70 mm respectively. Spacing of individual nails or staples should be minimum 150 mm distance from center to center.

Joineries

All common furniture joineries are possible for Century Prowud MDF. A few of the common joineries are illustrated below



Design of load bearing shelves

Century Prowud MDF are also suitable for load bearing applications such as shelves or storage units, cupboards, wardrobes etc. For these applications, thickness of the boards can be calculated as shown below:

$T=[5WL^3 \times 9.81/32ebd]^{1/3}$

Where

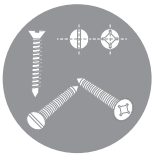
T = Shelf thickness (mm)	e = Modulus of elasticity (N/mm^2)
W = Total load uniformly distributed (kg)	b = Shelf width (mm)
L = Distance between supports (mm)	d = Centre deflection (mm)

Adhesives

All adhesives that are suitable for wood surfaces are suitable for Century Prowud MDF. We can use normal carpentry adhesives for gluing Century Prowud MDF, e.g. PVA glues. When bonding Century Prowud MDF with other materials, the choice of adhesive is mainly determined by the surface properties of the other material.

Hardware

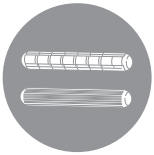
Though normal carpentry hardware can be used for fixing and joining Century Prowud MDFs, for durability and better results, use of recommended hardware is desired.



Fully threaded parallel screws.

Screws

The only fully threaded screw of proper size should be drilled & screwed into the panel after drilling the pilot hole (reference also be made of IS: 7170)



Dowels can be of plastic, metal, bamboo or wood.

Dowels

Dowels made of plastic, metal, bamboo or wood of proper size can be used and the diameter of the hole should be slightly more than the diameter of the dowels to avoid splitting.

Support shutters with an appropriate number of hinges.

Hinges

We can use all types of carpentry hinges for Century Prowud MDF. For better results and performance, the use of surface mounted hinge is recommended.

Locks

All types of locks like multi-purpose, mortise, cylindrical etc., can be used in Century Prowud MDF

Tips for fixing locks and hinges

- Do not force the door to exceed 93^{0} as it could damage the hinge
- Do not apply paint or polish
- Keep the hinges parallel
- For heavy and long shutters, use 3 or more hinges
- Recommended thickness: 19 mm
- Maximum size of cabinet of 34" x 22" (850 mm x 550 mm) for 2 hinges
- Do not hammer the screw for fixing hinges

FINISHING AND CARE OF EDGES

To seal the edges, start with sanding the edges of the board.

Any of the sealants mentioned alongside may be used to seal the edges.

The exposed edges can also be sealed with timber beading applied with glue.

PVC lipping applied with glue can also be used for edge banding.

Sealing of edges

- Sealing should also be done suitably for the areas exposed to fix hardware, hinges, cutting and routing etc.
- After completing the work, all the exposed edges should be sealed suitably with primer/paint/polish/wooden lipping or edge banding. This is required to prevent the boards from absorbing moisture through the atmosphere.
- You can use any of the following sealants for edge sealing:
  a) Epoxy resin
  b) Nitro-cellulose lacquer
  c) Polyurethane resin
  d) Polyvinyl acetate
  e) Synthetic enamel paint or varnish
  f) Synthetic wood painter
- The following can be used as lipping material
  a) PVC bands
  b) Melamine edge
  c) Solid wood strips
  d) Aluminium strips

Surface finishing

- Century Prowud MDFs are sanded with 180 grit finishes, hence no further sanding is required for painting, polishing and photo-lamination.

Painting/Polishing

- The smooth and fine finish of Century Prowud MDF makes it an ideal product for all kinds of painting, polishing and coating finishes, like Enamel, Acrylic, Nitrocellulose, Polyurethane, and Spirit/French/Melamine etc.
- While normal painting methods recommended by respective paint manufacturers should be followed, extra care should be taken for coating the edges. While coating, the edges should be sealed immediately after sanding as moisture in the air may cause the fibers to stand up and ruin the finish. (User may also refer IS: 2338, Part I & II)
- While painting, polishing and laminating Century Prowud MDF, it is recommended to finish the boards on the opposite surface also with the same material (e.g. painting, polishing or lamination) and thickness to prevent warping.

Lamination and Veneering

- The smooth and fine surface finish of Century Prowud MDF acts as an excellent substrate for lamination of wood veneer, paper, pre-finished foils, and melamine impregnated papers etc. using normal adhesives like PVA or Urea Formaldehyde and their derivatives.

A FEW THINGS TO KEEP IN MIND TO GET THE BEST OUT OF CENTURY PROWUD MDF

Dos

Storing and Handling

- Store boards horizontally on battens
- Battens should be of the same height to ensure surface flatness during storage
- Lift board edgewise while carrying/transporting
- While storing, avoid protrusion or overhanging of boards
- Avoid sharp, feathered protruding edges

Cutting & Sawing

- Chisel the scouring line before sawing when working on pre-laminated boards
- Use fine-toothed push/pull type saw depending on chisel marking to avoid chipping
- While cutting, hold the saw at a low angle
- Use higher RPM carbide-tipped machine saws for better working
- All sharp corners and edges should be rounded off

Screwing

- Use fully threaded parallel shank screws
- Fix screws 25 mm from corners and 75 mm from edges
- Fix screws in zig-zag fashion
- Drill pilot hole while fixing screws & nails (on edges)
- Allow sufficient clearance for screws and dowels of other fittings/joints while assembling

Sealing & Laminating

- Seal all edges and surfaces opened for moulding, routing, etc. must be sealed with proper sealants.
- Use polyurethane primers for sealing
- Use only Synthetic Enamel or Oil-based paints
- When laminating, use lamination of the same weight and thickness on both sides

Don’ts

- Do not store boards on floors or wet surfaces
- Do not drop, drag or slide boards on grit, dirt or grass, or one over another

- Do not use saw without marking the scouring line
- Do not hold the saw vertically while cutting
- Do not use Coarse Rip Saw

- Do not use conventional wood screws
- Do not use screws and nails on the edges of boards 12 mm & below
- Do not fix screws/nails in a straight line
- Do not hammer or over-tighten screws
- Do not make tight-fit joints. This could lead to cracking or glue starvation

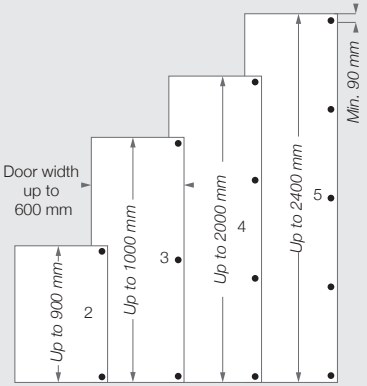
- Do not leave edge unsealed/open
- Do not use wood primers
- Do not use Acrylic Emulsion or Water based paints
- Do not use lamination papers of different weights or thickness, or laminate only one side

HINGES & FURNITURE FITTINGS

NUMBER OF HINGES PER DOOR

Door width, door height, door weight, plus the material quality of the door are key factors to determine the required number of hinges.

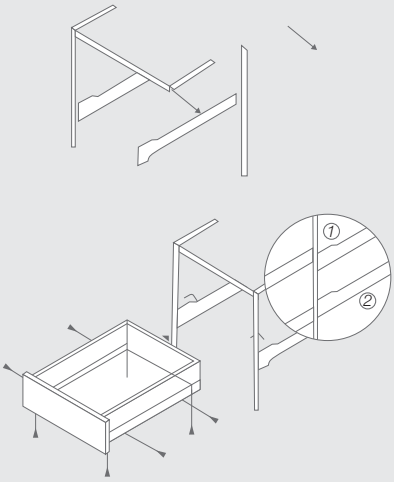
For stability, the distance between hinges should be chosen as large as possible.



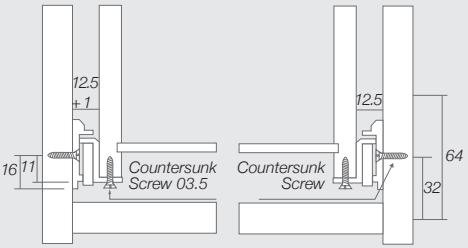
HINGES & FURNITURE FITTINGS

DRAWER CHANNELS INSTALLATION

ASSEMBLY

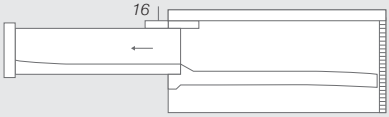


COUNTERSUNK SCREW



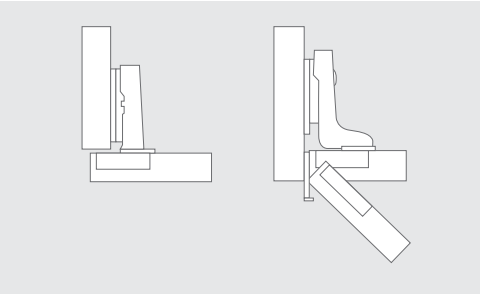
Runner width 12 mm
Installation width 12.5 mm for tolerance compensation

Drawer removal

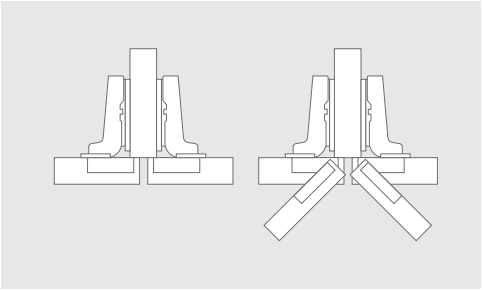


HINGES & FURNITURE FITTINGS

TYPES OF MOUNTING HINGES

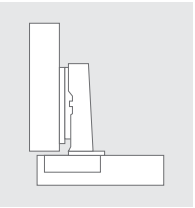


Inset (16 mm Cranking)
In this configuration, the door is positioned inside the side wall of cabinet. A reveal is required for opening the door. This configuration necessitates the use of heavily cranked hinges.
* The minimum door reveal, also called door deflection, is the space required for opening a door.



Half Overlay (9.5 mm Cranking)
In this configuration, two doors are positioned in front of the middle wall of a cabinet. The distance between the doors is the total required reveal. The door overlay is reduced which necessitates the use of cranked hinges.

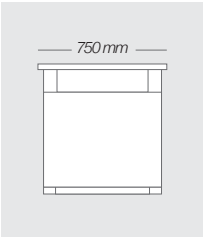
Full Overlay (0 mm Cranking)
In this configuration, the door is positioned in front of a side wall of the cabinet. The reveal at one side is such that the door can be opened safely.

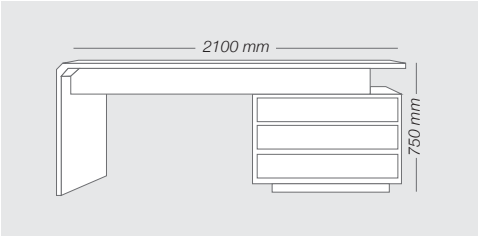


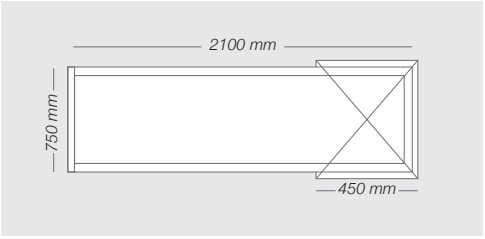
FURNITURE APPLICATIONS

OFFICE STAFF / EXECUTIVE TABLE

COMPONENTS		CENTURY BOARDS (MDF/Particle Boards)		THICKNESS SPECIFICATIONS
		Plain	Prelam	
Table Top	Length > 1500 mm	√	OSL	25 mm
Table Top	Length > 1500 mm	√	OSL	18 mm
Sides			BSL	30 or 25 mm
Laminates			--	1 mm
Drawer Unit	Carcass	√	OSL	18 mm
Drawer Unit	Back	√	OSL	5.5-7 mm
Drawer Unit	Skirting	√	OSL	18 mm
Drawer Unit	Front	√	OSL	18 mm
Drawer Unit	Box	√	OSL	12 mm
Drawer Unit	Drawer bottom	√	OSL	5.5-7 mm
	Screws			**Screw Size**
Executive Table	18 mm to 18 mm			8 x 38 mm
Executive Table	18 mm to 12 mm			8 x 42 mm
Executive Table	25 mm to 25 mm			10 x 50 or 8 x 50 mm
Drawer Unit	18 mm to 18 mm			8 x 38 mm
Drawer Unit	18 mm to 12 mm			6 x 32 mm
Drawer Unit	12 mm to 12 mm			6 x 24/32 mm



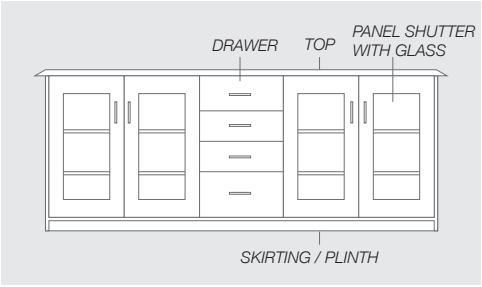


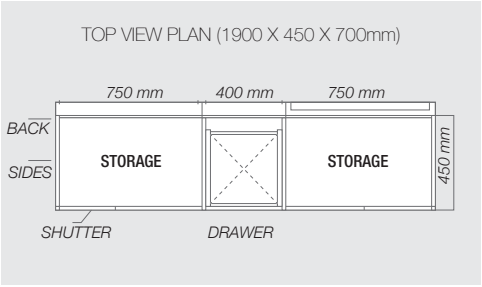


FURNITURE APPLICATIONS

HOME FURNITURE

COMPONENTS	CENTURY PROWUD MDF BOARDS		THICKNESS SPECIFICATIONS	
	Plain	Pre-Lam		
Top & Bottom	√	OSL	18 mm	
Sides	√	BSL	18 mm	
Skirtings & Dividers	√	OSL	18 mm	
Back	√	OSL	8 mm	
Front	√	BSL	18 mm	
Span not to exceed	√		900 mm	
Height of shutter	√	BSL	1800 mm (max)	
Width of shutter	√	BSL	450 mm (max)	
SCREWS			SCREW SIZE	DOWELS
18 mm to 18 mm			8 x 38 mm	36
18 mm to 25 mm			8 x 42 mm	36





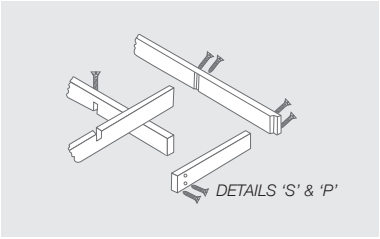
Note: All the unexposed areas should be treated with suitable primer. Check and treat walls & ceilings for any dampness/leakage before installation and rectify if necessary.

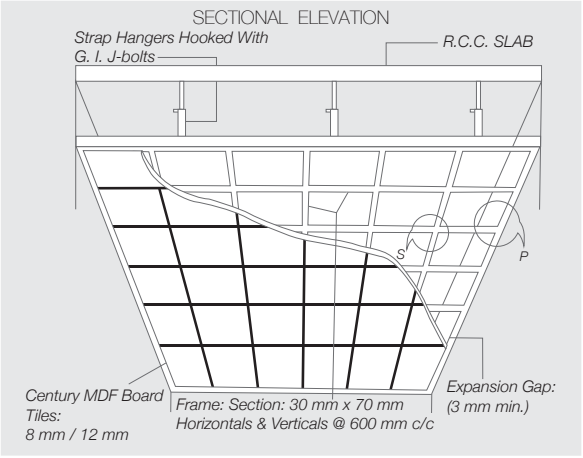
CEILING SUSPENDED

COMPONENTS	RECOMMENDED SPECIFICATIONS
Frame Section	70 mm x 30 mm thickness
Spacing between Horizontal & Vertical Sections	600 mm centre to centre
Expansion Gap between cladding joints	Minimum 3 mm
Cladding Tiles	12 mm / 8 mm thickness
Strap Hangers (MS Flat x 6 mm) hooked to G.I. J-bolts fixed to ceiling at spacing	1200 mm centre to centre
Spacing between fully parallel threaded screws	300 mm centre to centre

SCREWS	SCREW SIZE
I) 8 mm / 9 mm thick tile	6 x 25 mm
II) 12 mm thick tile	6 x 32 mm
CLEATS	SIZE
12 mm thick tile	75 mm (3")

THICKNESS OF TILE FOR CLADDING	SIZE OF TILE
I) 8 mm / 9 mm	600 mm x 600 mm
II) 12 mm	600 mm x 600 mm 1200 mm x 600 mm / 1200 mm 1800 mm x 600 mm / 1200 mm 2400 mm x 600 mm / 1200 mm

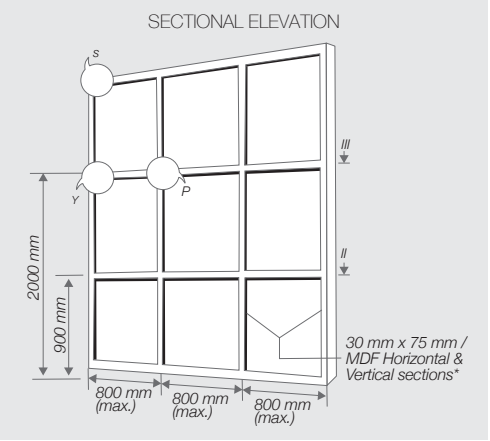


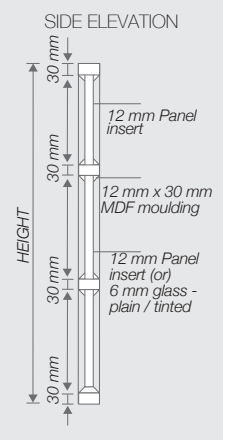


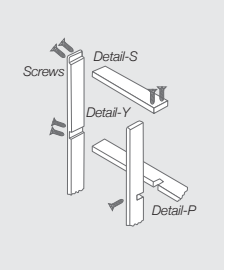
Note: The unexposed area like the tiles & the entire framework has to be duly treated with two coats of suitable primer.

SINGLE SKIN PARTITION

COMPONENTS	RECOMMENDED SPECIFICATIONS
Horizontal & vertical sections (Height less than 10'- 0" or 3.0 meters)	75 mm x 30 mm thickness
Horizontal & vertical sections (Height more than 10' - 0" or 3.0 meters upto 16'- 0" or 4.8 meters)	100 mm x 30 mm thickness
Spacing between verticals (Height less than 10'- 0" or 3.0 meters)	Maximum 800 mm centre to centre
Spacing between verticals (Height more than 10'- 0" or 3.0 meters) upto 16' - 0" or 4.8 meters)	Maximum 900 mm centre to centre







For height less than 10'- 0" the horizontals to be placed one at bottom, second at 900 mm height, third at 2000 mm height, and one at ceiling level. The joinery for horizontal and vertical members is with HALF LAP and SCREWS.

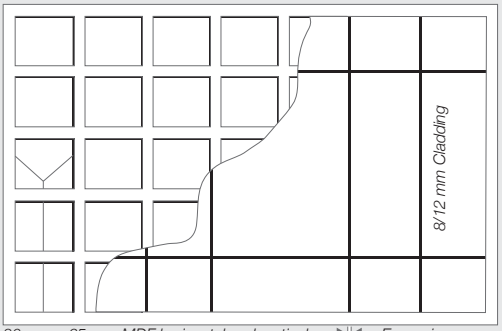
For glazed partitions, 6 mm thick plain/tinted glass to be fixed in between II & III horizontals with 30 mm x 12 mm moulding fixed with headless nails.

Note: The unexposed area like the members at floor, wall and ceiling should be coated with a minimum of two coats of suitable paint.

DOUBLE SKIN PARTITION

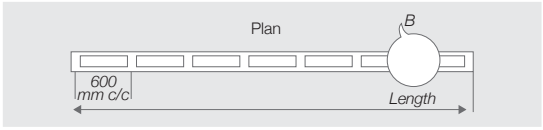
COMPONENTS	RECOMMENDED SPECIFICATIONS
Horizontal & vertical sections (Height less than 10'- 0" or 3.0 meters)	65 mm x 30 mm thickness
Horizontal & vertical sections (Height more than 10'0" or 3.0 meters upto 16'0" or 4.8 meters)	80 / 81 mm x 30 mm thickness
Spacing between verticals (Height less than 10'0" or 3.0 meters) cladding tiles	600 mm centre to centre 8 mm / 12 mm thickness
Expansion gap between every joint of cladding	3 mm to 6 mm

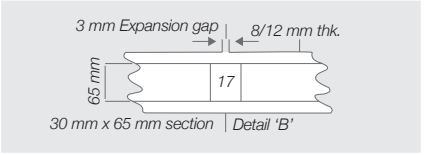
SECTIONAL ELEVATION



SCREWS	SCREW SIZE
a) Framework	8 x 38 mm or 8 x 42 mm
b) Cladding	
I) 8 mm thick	6 x 25 mm
II) 12 mm thick	6 X 32 mm

HEADLESS NAILS	NAILS SIZE
CLADDING ONLY	
I) 8 mm thick	20 gauge (20 x 18 mm) = 3/4" long
II) 12 mm thick	17 gauge (17 x 25 mm) = 1" long
CLEATS	SIZE
12 mm thick	75 mm (3")



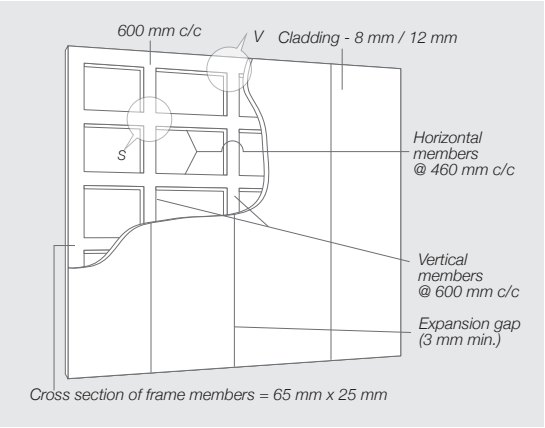


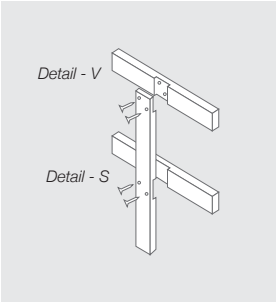
Note: The unexposed area like the members at floor, wall and ceiling should be coated with a minimum of two coats of suitable primer.

WALL PANELLING

COMPONENTS	RECOMMENDED SPECIFICATIONS
Frame cross section	65 mm x 25 mm
Spacing between horizontal frame sections	450 mm centre to centre
Spacing between vertical frame sections	600 mm centre to centre
Expansion gap between cladding joints	Minimum 3 mm
Cladding tiles	8 mm/12 mm thickness plain or pre-lam

SCREWS	SCREW SIZE
a) Framework	8 x 25 mm
b) Cladding	
I) 8 mm thick	6 x 25 mm
II) 12 mm thick	6 x 32 mm



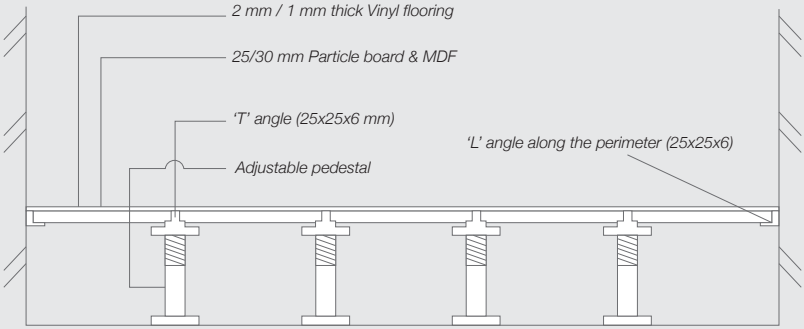


Note: Prior to mounting on the wall, the entire framework and the cladding panels facing the frame have to be provided with at least two coats of suitable primer. Before commencing work, check the walls and ceiling for any dampness or leakage. If leakage is found then apply at least two coats of suitable primer.

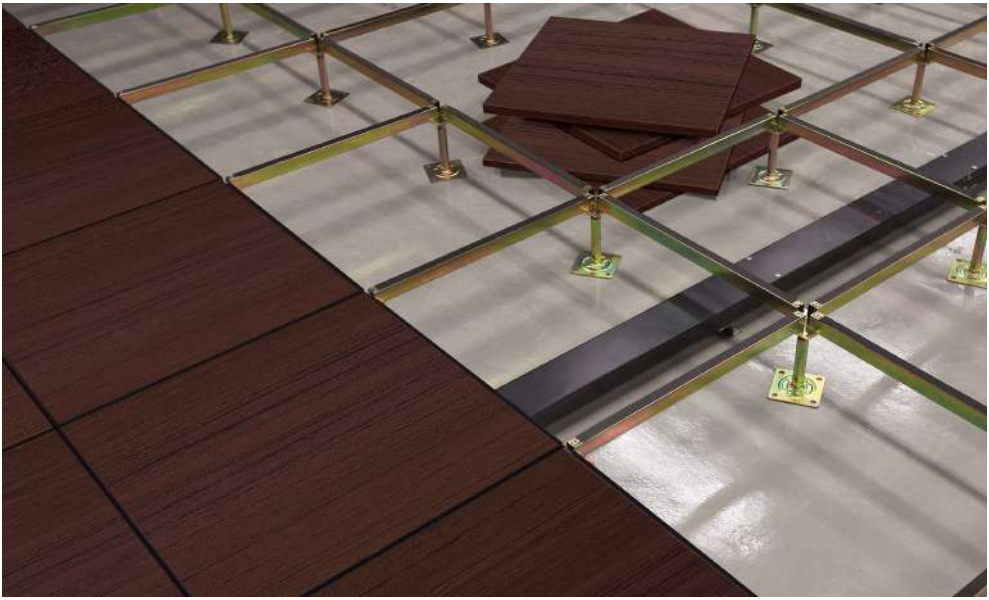
CAVITY FLOORING

COMPONENTS	RECOMMENDED SPECIFICATIONS
Flooring panel	25/30 mm thickness
Grid size / Tile size	600 mm x 600 mm
Spacing between fully parallel threaded screws	300 mm centre to centre
Spacing between T angles	600 mm centre to centre
T angle	Manufacturer's / Designer's recommendations should be followed
L angles along the perimeter	
Vinyl flooring	
MS framework with adjustable pedestals with top and base plates	

SECTONAL ELEVATION



Note: All the unexposed areas should be treated with suitable primer. Check and treat walls & ceilings for any dampness/leakage before installation and rectify if necessary.



RECOMMENDED CENTURY PROWUD MDF BOARDS, APPLICATIONS, SPECIFICATIONS

SR. NO.	APPLICATIONS		CENTURY PROWUD MDF	
	Product	Components of Century Prowud MDF	Thickness to be used	Grade recommended
1	Suspended Ceiling	Tiles Framework	8 mm /12 mm / 30 mm	Grade I & II
2	Wall Panelling	Tiles Framework	8 mm /12 mm / 25 mm	Grade I & II
3	Solid Core Door Shutters Panelled Door Shutters	Panel Inserts	12 mm	Grade I & II
4	Partitions			
	I) Single Skin	Panel, Framework	12 mm /18mm /30 mm	Grade I & II
	II) Double Skin	Panel, Framework	8 mm /12 mm / 30 mm	Grade I & II
5	Flooring		25 mm / 30 mm	Grade I
6	Column		18 mm	Grade I & II
7	Pelmets		18 mm	Grade II
8	Cornices		18 mm / 25 mm/ 30 mm	Grade II
9	Handicrafts		18 mm / 25 mm/ 30 mm	Grade II
10	Conference Tables, Office Tables / Workstations, Computer Workstations, Driving Tables, Study Tables	Tops, Sides Skirting	18 mm / 25 mm 12 mm / 18 mm	Grade II
11	Dressing Tables, Bedside Tables, Centre Tables	Top, Sides, Back Mirror Back	12 mm / 18 mm 5.5-7.0 mm 12 mm	Grade II
12	Storage Units, Wardrobes, Wall Units, Display & Storage Cabinets, Shoe Racks, Filing Units	Tops, Sides, Dividers Back Shutters, Shelves, Drawers: Front Sides Bottom	18 mm / 8 mm / 5.5-7.0 mm 12 mm 18 mm 18 mm 12 mm / 18 mm 5.5-7.0 mm / 8 mm	Grade II
13	Kitchen Cabinets	Frame Sides, Shelves, Shutters Drawers	25 mm / 30 mm 18 mm As mentioned above	Grade I
14	School Benches/Desks/Tables Book Shelves		18 mm	Grade II
15	Black Board	Panel Frame	12 mm 30 mm	Grade II
16	Interiors of Carriages; Buses; Travel Coaches; Railway Carriages	Seat Backrest, Ceiling Cladding	12 mm / 18 mm 5.5-7.0 mm / 8 mm	Grade I & II
17	Speakers; Audio Visual Cabinets (TV) Scientific Instruments		5.5-7.0, 9.75,10,12,18 mm	Grade I & II
18	Architectural, Engineering & Design Models;		5.5-7.0 mm	Grade I & II
19	Exhibition Pavilion	Panels	8 mm / 12 mm	Grade I & II
20	Picture Frames		12 mm	Grade I & II
21	Audio Video Trolley	Top Sides	18 mm 18 mm	Grade I & II Grade I & II
22	Photolamination	Back	8 mm	Grade I & II
23	Beds		12 mm - 30 mm	Grade I & II

CENTURYPROWUD®

CENTURYPLY®

Century Plyboards (India) Limited

Engineered Panel Products Division

Sales & Marketing Office: Tower B - 8th Floor, Vatika Mindscape, Sector 27D, Faridabad, Haryana - 121003.

Ph.: 7042399909 | Email: prowud@centuryply.com

Follow us on: @centuryprowud

For more information, call:
1800-200-0440

CRESCENT/04-2024