



Mikasa™
DOORS & FRAMES

ENGINEERED
DOOR SOLUTIONS
FOR MODERN HOMES



Made by

 **Greenlam™**
Industries Limited

MASTERPIECES


For years, Greenlam Industries Limited has been infusing creativity and beauty into homes and commercial spaces, turning it into sheer pieces of brilliance. A name to be reckoned with in more than 100 countries, Greenlam Industries Limited is standing tall with its guiding philosophies of innovative technologies and creative solutions.

Within India, Greenlam Industries Limited has developed a network of over 12,000 distributors, dealers and showrooms reaching every corner of the country. It is recognised as an image leader for introducing innovative range of surfacing products like laminates and veneers and bringing new categories of products to the country.

In 2014, Greenlam Industries Limited became the first company to manufacture Engineered Wood Floors in India. Mikasa Engineered Wood Floors is made only from real wood and draws inspiration from the Latin phrase "Mi Casa, Su Casa", which means "My home, is your home." It embodies this open-armed welcome that evokes free-flowing ambience of peace, health and comfort.



FROM THE HOUSE
OF GREENLAM



COMPLETE DOOR SOLUTIONS

INTRODUCING MIKASA DOORS & FRAMES

In a market served mostly by traditional flush doors, Mikasa Doors & Frames introduces a revolutionary new concept. It offers superior quality doors and matching frames as a single, factory finished unit; a natural progression over the old carpentry methods where the door and frame are made separately and hand finished on site.

Because Mikasa Doors & Frames comes as an integrated set, it is ready to install, unlike the current method in which the door frame is installed in the brick-work stage and suffers deformation during the later stages of building construction.

Come, open the door to new world of quality and designs.

THE BENEFITS OF

MIKASA DOORS & FRAMES

PERFECT PACKAGE

Complete Door Solution as doors, frames and accessories are shipped from factory as a fully finished single door set.

DOOR AND FRAME ARE MADE OF SAME WOOD AND FINISHING MATERIAL

Door Frame and Panel have matching look and finish as decorative veneer and laminate are made in-house. This isn't possible through traditional methods where the frame and panel come from different vendors and are hand finished on site.

DOOR AND FRAME ARE MADE AS PER ACTUAL SIZES

The factory finished door and frame don't require resizing, unlike those made using traditional methods. The product looks new for a lifetime as the factory finish lasts for a long time.

EVERYTHING IS FACTORY MADE (INCLUDING EDGE BANDING, POLISHING AND HARDWARE)

Aesthetics, fit and finish are superior. UV lacquer and polishing line used in the process follow the latest European practices.

LIFELONG QUALITY ACHIEVED BY IMPROVING THE PRODUCT AND MANUFACTURING

Superior product design, manufacturing and installation processes result in lifetime performance. The door set is backed with a 10 year performance guarantee.

HIGHER VALUE AND LIFETIME PERFORMANCE

Cost for Mikasa Doors & Frames is known upfront, unlike traditional methods where it is disaggregated. Time and effort spent in buying wood and supervising on-site construction is eliminated. Being factory finished, Mikasa Doors & Frames requires no polishing or regular maintenance.



OFFERINGS

MIKASA DOORS & FRAMES

PRODUCT RANGE

NON FIRE RATED

Made of 5 layers with tubular core which is sturdy and load-bearing. It has various applications in residential and commercial spaces, where Fire Doors are not mandatory.

FIRE RATED

Designed for areas prone to fire hazard, to prevent the spread of fire and smoke and provide a safe exit in case of emergency.

DOOR LEAF COLLECTION

Unfinished door leaf can also be supplied with either Veneer or HPL facing which can be resized up to 10mm on each side.

SPECIALITY DOORS

- **Radiation Shielding:** Constructed for areas exposed to high levels of radiation, such as hospitals and laboratories
- **Vision Panel:** An aesthetic and functional solution to the problem of creating light and visibility through doors
- **Acoustics:** Designed to achieve optimum levels of sound reduction of up to 48Rw dB

SOLUTIONS FROM MIKASA

SURFACE FINISHES

VENEERS | LAMINATES | PAINTED | PRIMED

SIZE AND THICKNESS

Our Fire Rated doors come in 44mm and 54mm of thickness, while Non Fire Rated doors come in 38mm and 44mm of thickness.

HARDWARE AND ACCESSORIES

Our door sets are available with a wide range of hardware and accessories for seamless functioning and a long life, as desired by the customer.

CONFIGURATIONS

SINGLE LEAF | EQUAL PAIRS | UNEQUAL PAIRS

UPGRADE TO ENGINEERED THE MIKASA ADVANTAGE

Traditionally, doors have been made with real wood for which we have a natural affinity. Today, good quality wood is both scarce and expensive. Skilled carpenters who can give it the shape and form we desire are also not so easily found. Being an organic material, wood requires careful preservation and is not structurally stable either.

An Engineered Door is designed to overcome the shortcomings of real wood and give the user the rich feel of wood.



STRONGER AND WEATHER SEALED FROM 6 SIDES

1. Engineered Doors are designed with precision.
2. The sanded Particle Board Core is pressed under 120 MT of pressure into a 'unitized' panel, making the doors stronger and immune to weather fluctuations.
3. The finger-jointed construction makes the doors stronger and less prone to bending.
4. The factory finishing ensures a comprehensive 6-side protection, shielding the door against hostile weather.



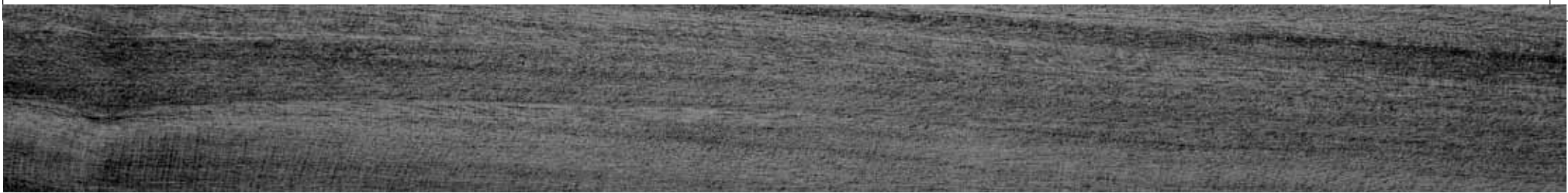
ENGINEERED FRAMES PERFORM BETTER THAN ROUTED FRAMES

1. The finger-jointed hard wood core of the Engineered Frame makes it stronger, more stable and resistant to bending. Foam fixing prevents moisture from penetrating. It is also faster than conventional doors and frames fixing methods.
2. Engineered frames are stained to match the veneer/laminate on the door panel. Its 'stepped' look enhances its aesthetic appeal.



BETTER QUALITY OF RAW MATERIALS

1. Consistent quality is the biggest promise when buying wood products from a large player in the organized sector.
2. Supplies are entirely imported, except for decorative finishes which are manufactured in-house.
3. The hardware comes with 'Mikasa' badge which guarantees a long life.



BETTER AESTHETICS AND PRODUCT LIFE

1. The Smooth finish is achieved by sanding before fixing the decorative finish so that internal imperfections do not reflect on the surface.
2. UV coating is superior to PU or Melamine as it is harder (4 Vs. 1.5) and is resistant to strong chemicals like Acetone and Butyl Acetate cleaners. The aesthetic appeal lasts longer and the products look new.
3. Due to the roller-coating process, the door is sealed from all 6 sides and becomes entirely weather stable. This is not possible with hand spray, especially around corners and on the hinge-side of door.



CLEAN INSTALLATION PROCESS

1. A good product can be ruined by a poor fitting process. Since door sets are manufactured as per measurements, no resizing is required on site.
2. Fixing is done after the first coat of paint using anchor fasteners (no holdfast) and expandable PU Foam. Installation is much faster; the gap between door and wall is covered by an architrave (no putty).
3. Hardware recessing is done using CNC equipment at factory for a longer working life and smooth operation.



FACTORY MADE AND FACTORY FINISHED

1. Ready to fit products greatly reduce the completion time of the project.
2. Ability to deliver large volumes for large projects on time and with assured quality.
3. Door and frame both come from one factory with one finish, making them part of a complete door set.



SUSTAINABILITY

1. Imported all FSC accredited materials can be offered.
2. Particle Board meets E-1 emission norms. Similarly, UV Lacquer has Reach, ROHS and ODC certifications.
3. Use of wood substitutes aids in the environmental conservation.



FIRE RATED

DOORS & FRAMES

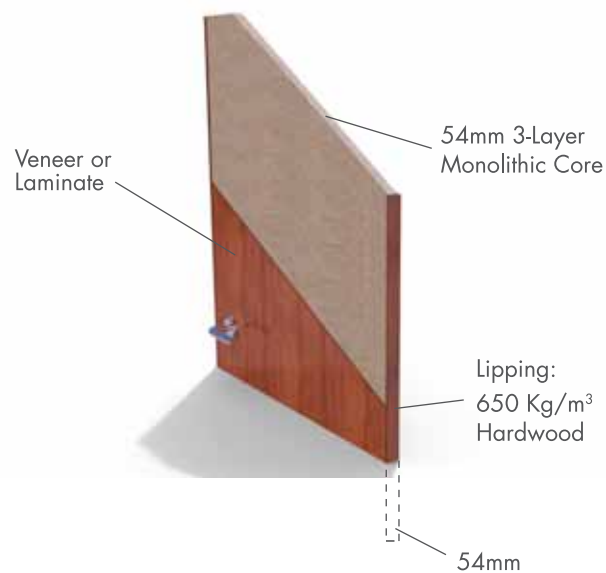
Fire Rated Doors & Frames provide a safe exit in case of fire emergency by preventing the spread of fire and smoke. It's an integrated fire protection system – a Fire Door Panel, with its frame and fixtures – which complies with BS476 Part 224. Fire Test Certification (Warrington Fire Research Centre, UK).

- Available in fire ratings of **FD30**, **FD60**, **FD90** and **FD120** (FD is fire resistance ratings, i.e. the total minutes the door can withstand fire)
- Made of solid core which is dense and has a slower burning rate as compared to traditional cores
- Available in 44mm and 54mm thickness with door leaf, door frame and hardware certified for fire safety

NOTE: Fire Rated Doors & Frames must be installed as a complete set in order to perform during fire emergencies.

CONSTRUCTION

Construction of FD60 Solid Core Timber Doors (54mm)



DOOR PANEL

The inner construction of door leaf is Solid Core Filler and has the following components:

HIGH DENSITY PARTICLE BOARD

- Triple-layer High Density Particle Board imported from Germany
- Pre-tested for fabrication of Fire Doors
- Dual core layers of high density wood chips
- Achieved Severe Duty Grading in 'Single Action Single' and 'Double Action Single' Mode
- Tested For Durability

- Vertical Load
- Static Torsion
- Soft & Heavy Body Impact
- Slamming Shut
- Slamming Open
- Closure Against Obstruction
- Resistance To Jarring & Vibration
- Abusive Force On Handles
- Operating Forces
- Cycling

FACING OR FINISHING MATERIAL

- High Pressure Laminates (0.8mm)
- Natural Veneer (0.6mm)
- UV Lacquer finishing for veneers

WOOD EDGING

- Matching hardwood edging of 6/10/12mm thickness is fixed using PU edge banders to finish and seal the door panel

NOTE: Every effort is made to colour match hardwood door lipping, frames etc. with veneers and High Pressure Laminate on door facing. However, as timber is a natural material, variations in shade and colour may occur.

DOOR FRAME

Door frame is made of slow burning, heavy density hardwood to match the Fire Rating of the door. Intumescent strips rebated into all 3 sides of the door frame which expand to seal the gap between the door and frame to prevent the spread of fire and smoke. The door frame is also veneered to match with the finish on the door panel.



It consists of the following components:

1. CORE

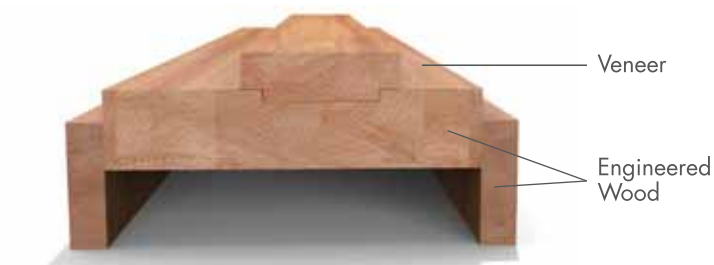
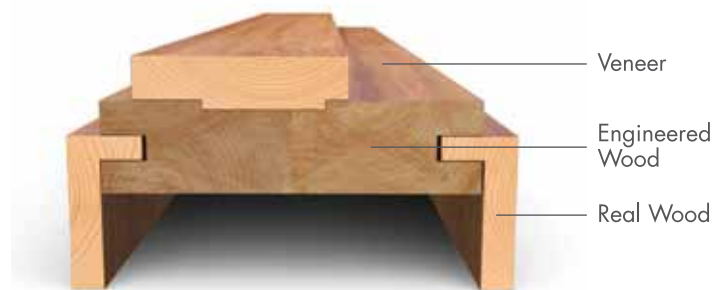
- Made of finger-jointed solid wood which is chemically treated and seasoned
- Prevents bending and bowing

2. DOOR STOPPER

- 15mm thick and made from matching timber
- Positioned so that head of the anchor bolts is covered
- Holes for attaching anchor fasteners predrilled at the factory
- Fixing done with head-less nails covered with wax polish

3. SURFACE FINISHES

- Core is covered with 6mm timber at ends and with 0.6mm veneer at the face
- Polished to match the veneer or wood pattern specified for door panel
- For solid High Pressure Laminate, frame is stained or painted in suitable neutral colours



ARCHITRAVE

- Available in standard sizes of 50mm x 8mm and 50mm x 6mm and can be customised according to the customer requirements
- Covers the gap between wall and door frame
- Accommodates variations in aperture size and slope in wall
- Two sets of architrave (6 pieces) usually supplied with every door frame





NON FIRE RATED

DOORS & FRAMES

Non Fire Rated Doors & Frames series is available in 35mm, 38mm and 44mm thickness. Its interior is composed of tubular core with HDF Crossband which is sturdy and load-bearing. It has various applications in residential and commercial spaces.

CONSTRUCTION

DOOR PANEL

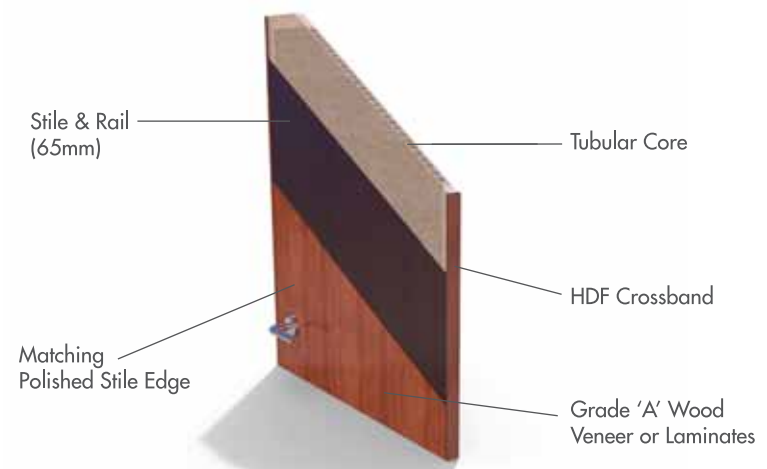
The door panel has a Tubular Core which offers the following benefits:

1. TUBULAR PARTICLE BOARD FILLER

- Resists pressure up to 20 kg/cm² without any surface deformation
- The board has a tolerance of +/- 0.1mm to prevent internal undulations on door surface
- Can be calibrated (sanded) to achieve a uniform thickness
- Lighter weight which is an advantage in transporting doors
- Less swelling/shrinking as compared to wood baton filler doors
- Lower burning rate and sound transmission as compared to traditional products

2. STILE & RAIL

- Used to give strength to the door and for securely attaching hinges and hardware
- Stapled corners
- Frame assembled in a machine fixture for accuracy
- Reinforcement provided for lock area



WOOD VENEER

3. HDF CROSSBAND

- HDF (High Density Fibreboard) skin placed on either side of the core assembly
- Glued using D3 adhesive under heat and pressure to create a unitised door panel

4. FACING OR FINISHING MATERIAL

- High Pressure Laminates
- Natural Veneer
- UV Lacquer finishing for veneers

5. WOOD LIPPING

- Matching wood lipping fixed using edge banders to fully seal the door panel
- Prevents moisture ingress during monsoons
- Prevents bending and bowing
- Finished door panel looks attractive and sturdy

DOOR FRAME These are available in 45mm (30+15mm) thickness, 110/140mm width and can be customised. Rest of the components are same as Fire Rated Doors.

ENGINEERED DOORS

Vs

WOODEN DOORS

The sturdy wooden doors of generations gone by are rarely available these days due to the scarce availability of good quality wood like Burma Teak. The skilled labor that could fashion these elegant doors with rich looks is also rarely found. Some points to consider when buying wooden doors in the present day are:

Which wood am I getting?

For large volume jobs, the most commonly used wood is African Teak and Malaysian Jungle Wood of mixed species. While the former is expensive, the latter has many quality issues. As large plank sizes are difficult to find, it necessitates one or more joints in the panel which makes color matching difficult.

Natural materials are engineered to make Engineered Doors consistent in quality and uniform in look and finish.

Will it have adequate strength?

The strength of the tongue in the 'tongue-and-groove' construction of the Wooden Door Panel determines the strength of the door. The 8-10mm tongue for an entry door of 30-32mm thickness may not be strong enough.

The unitized construction of Engineered doors (38mm or 44mm) makes it far more stronger in comparison.

Am I getting rich colour and lustre?

Only good quality wood guarantees a rich tone and lustre. Wood of mixed species achieve the same by staining dark or painting it to maintain uniformity.

Built with wood veneers and finished in natural tones, Engineered Doors are less expensive than solid wood doors. They offer a wide range of colors and the wood retains its natural lustre. For instance, a Walnut door can be offered in engineered construction, which is solid wood would be very expensive.

Will it be weather stable?

The differential expansion causes less weather stability in the MDF panel. Additionally, correct seasoning and sealing controls the thermal and moisture variation due to fluctuation in weather, thereby providing stability.

The unitized construction of Engineered Door fully seals it from all 6 sides, making it weather stable.

How easy will the maintenance be?

Hard finished doors with PU or Melamine finish would require periodic maintenance due to lower surface hardness and barrier properties.

The UV finish of Engineered Doors makes it harder and more resistant, maintaining its fresh appeal for long. Longer trouble-free life is ensured through hardware fixing done using CNC equipment.

What are the risks involved in importing doors with estimated sizes?

Advance buying is risky as site conditions could force a change in aperture size. Engineered Doors curb this risk with a 'just in time' supply to match on-site progress.

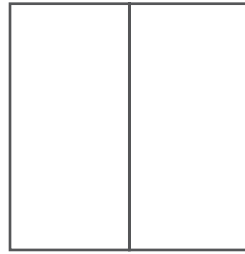
CONFIGURATION & HANDLING

CONFIGURATIONS

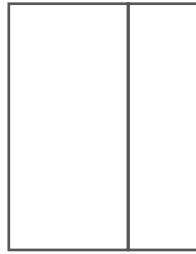
Single Leaf



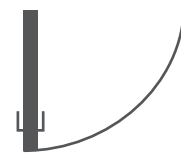
Equal Pairs



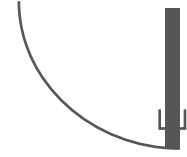
Unequal Pairs



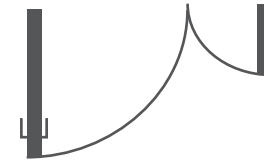
HANDLING



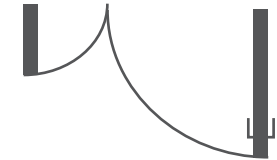
Single Action L/H Door Swing



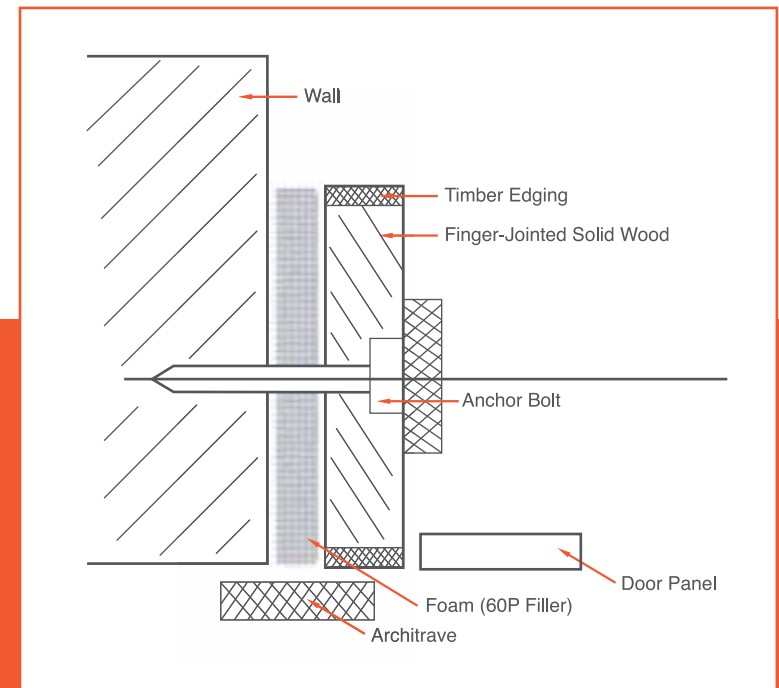
Single Action R/H Door Swing



Single Action L/H Leading



Single Action R/H Leading



INSTALLATION & DAMAGE PROTECTION

To ensure the longevity and performance of Mikasa Doors & Frames, certain measures need to be followed. Mikasa Doors & Frames must not be installed until all wet trades on site are completed. Kindly refer to installation guide for the exact process for storage, installation and damage protection.

As a finished product, the installation of Mikasa Doors & Frames must begin only after one coat of paint has been applied on walls. Even after installation, Mikasa Doors & Frames must be protected until the site is occupied and becomes functional.

Mikasa Doors & Frames are made as per actual measurements. In case the flooring or plastering is not completed, it would not be possible to take measurements which may lead to unavoidable delays.

RANGE OF FINISHES

VENEERS



WHITE OAK



WHITE ASH



TEAK



WALNUT



SAPELE



WENGE



MAPLE



STEAM BEECH

LAMINATES - WOOD GRAINS



LAKARI NATURAL 3248



AMERICAN ASH 748



BURMA TEAK 690



AMERICAN WALNUT 608



SAPELE 749



WENGE 731

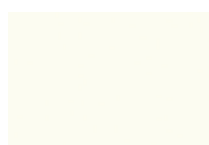


CRYSTAL MAPLE 712



LIGHT BEECH 612

LAMINATES - PLAIN COLOURS



WOOL 107



SILVER GREY 270



DARK GREY 261



BLACK 401



ELECTRIC BLUE 291



DARK GREEN 245



RED DYNASTY 204



MOONSTONE 133

THE BESPOKE COLLECTION

Crafted to meet your every need, the Bespoke Collection is our signature range. Tailored exclusively to your desire, the Bespoke Collection lets your door and frame be a reflection of you. You can also choose any décor from Greenlam Laminate and Decowood Veneer collections. Find your perfect match from a range of variants, surface finishes and accessories available in the Bespoke Collection.

SIX EASY STEPS TO YOUR PERFECT DOOR

- Step 1** Consult with a Mikasa Bespoke Partner to create your perfect door.
- Step 2** Place your order.
- Step 3** Receive detailed drawings of your door.
- Step 4** Approve your drawings.
- Step 5** Receive a tracking number so you can keep up to date with the production process.
- Step 6** Our production team starts creating your door. Once completed, your beautiful bespoke door arrives ready for installation.





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