SAM TRIMAX
Technical Guide

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About SAM TRIMAX

SAM TRIMAX is a revolutionary cladding product constructed using a high performance wood panel with a 50 year guarantee.

Perfect for houses, garden rooms, sheds, and leisure homes, SAM TRIMAX presents a durable and decorative solution to upgrading the aesthetics of a new or existing building with a product that is guaranteed to stand the test of time with minimal maintenance.

Unlike less sustainable PVC alternatives, SAM TRIMAX retains the premium look only available with timber cladding while offering the dimensional stability that minimises movement and helps with coating longevity.

With a 50-year lifespan, SAM TRIMAX is engineered to provide long-term protection against rot and decay, delivering a sustainable and cost-effective non-structural solution for internal and external applications.

Designed to enhance both new builds and renovatins, this quality timber cladding is available in primed or fully finished options, ensuring a hassle-free installation with a flawless, long-lasting finish. Projects can be completed using SAM TRIMAX fascias and soffits, available as standard in white.

MEDITE TRICOYA EXTREME

SAM TRIMAX is crafted from MEDITE TRICOYA EXTREME (MTX), a high-performance panel product renowned for its exceptional durability and stability in demanding environments. When combined with its outstanding machinability, MTX makes SAM TRIMAX the ideal cladding solution, offering a flawless finish and minimal maintenance.

MTX is manufactured using an innovative wood treatment process that enhances both its durability and stability. The unique acetylation process modifies the wood at a molecular level, making it more dimensionally stable to variations in temperature and humidity. This process also makes the wood highly durable, as it prevents the material from being easily broken down. Acetyl groups, which are naturally found in all wood species, are added to the wood during this process, ensuring no harmful chemicals or toxins are introduced. Unlike traditional treatments that only improve durability, this process enhances the wood's stability throughout, offering a superior product that lasts longer and performs better in various conditions.

Apart from creating exceptional dimensional stability, the process enables MTX to achieve Class 1 durability, leading to resistance to biological decay which exceeds oak.

MTX has been successfully utilised in a wide array of applications, including but not limited to external doors, outdoor kitchens, planters, sculptures, artistic installations, signage, shopfronts, and wet rooms.

DURABILITY
Extended performance guarantee of 50 years on the base panel

DIMENSIONAL STABILITY
Swelling and shrinking dramatically reduced

LOW MAINTENANCE
Easy and infrequent maintenance

SUSTAINABLE MATERIAL
Manufactured from FSC®-certified and other controlled sources

CREATIVE FREEDOM
Smooth surface to apply any paint colour

FSC
www.fsc.org
FSC® C009061
The mark of responsible forestry

SAM TRIMAX Cladding

SAM TRIMAX decorative cladding is offered in two distinct profiles: Double Shiplap and Double Tongue & V-Groove. Both profiles can be installed either vertically or horizontally, allowing for flexibility in design to achieve the desired aesthetic.

Double Shiplap design: The overlapping scalloped profile creates beautiful dimension, depth, and a natural shadow line, giving your project a striking yet refined finish.

Double Tongue & V-Groove design: A sleek tongue and groove profile with a V-joint creates a seamless, modern aesthetic, perfect for a variety of architectural styles.

Available in a standard thickness and length, with a choice of widths as detailed below. Select from either primed or fully finished options to suit your project needs. Both primed and fully finished are detailed with a subtle brushed texture for a refined look. Primed is one coat at 120 Micron wet film applied via vacuum coater on all four sides. Fully finished is a second coat at 120 Micron wet film spray applied on the initial primed board built on the visible surfaces only when installed.

Profile	Double Shiplap				Double Tongue & V-Groove			
Thickness	12mm				12mm			
Length	4880mm				4880mm			
Gross Width	194mm, 244mm, 294mm				194mm, 244mm, 294mm			
Net Width	180mm, 230mm, 280mm				180mm, 230mm, 280mm			
Finish	Primed or Fully Finished				Primed or Fully Finished			
Colour	Primed Silk Grey RAL7044	Traffic White RAL9016	Anthracite Grey RAL7016	Silk Grey RAL7044	Primed Silk Grey RAL7044	Traffic White RAL9016	Anthracite Grey RAL7016	Silk Grey RAL7044

Cladding Installation Recommendations

SAM TRIMAX can be installed horizontally or vertically. As a general rule the installer should follow the same recommendations as for timber cladding products, with a ventilated cavity present behind the boards. It is recommended to install SAM TRIMAX to a subframe that can be fixed directly to the main frame by using brackets depending on the structure. The timber battens used for the subframe should be of the required durability of the application either naturally or by treatment.

Ventilation

To ensure that rainwater or possible condensation behind the cladding is removed and to prevent issues associated with moisture accumulation behind the panels, a continuously ventilated cavity should be present behind the outer cladding. This cavity needs to be ventilated at the top and bottom of the façade (at least 200mm^2 per m^2 cladding), and it is recommended that the depth of the cavity behind the cladding is at least 20mm. When required by Building Regulations cavity barriers must be installed in accordance with best practices without preventing vertical ventilation.

Note that the cavity depth as well as the minimum size of the ventilation in-and outlets must be in accordance with applicable building standards and regulations and that a water repellent, breathable membrane is applied at the back of the cavity. An insect mesh might be required in ventilation in-and outlets.

Horizontal Boarding

SAM TRIMAX cladding can be installed horizontally to a subframe to create the ventilated cavity.

Typically, the subframe will be made of vertically fixed timber battens, fixed to the main structure directly or with brackets, spaced at maximum 400mm intervals. The dimensions of the subframe timber battens will depend on the required depth of the ventilated cavity and application.

Cladding Installation Recommendations

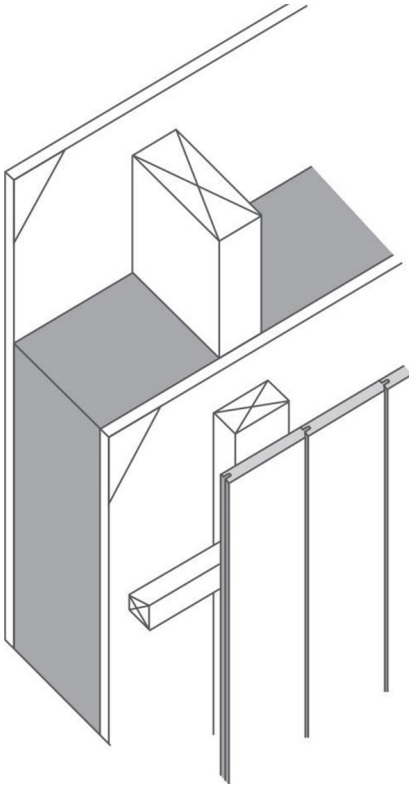
Vertical Boarding

SAM TRIMAX cladding can be installed vertically to a subframe to create the ventilated cavity.

It is recommended to use a double subframe where horizontal fixing counter battens are fastened on vertical battens fixed to the main frame. The horizontal counter battens should be chamfered at the top side, shedding water into the cavity. The lowest batten should slant inward at the bottom, creating a drip lip at the intersection with the vertical battens.

Vertical battens should be spaced at maximum 600mm spacing or as specified by the project manager in accordance with the building details. The horizontal counter battens should be spaced at maximum 400mm intervals. The dimensions of the subframe timber battens will depend on the required depth of the ventilated cavity and application.

If only horizontal battens are used, additional measures need to be taken to ensure sufficient ventilation. For example, making cut-outs in the battens or interrupting the battens at regular intervals and staggered relative to each other. In this case it is preferable if the horizontal battens are chamfered on the top edge to shed any water outwards.



Recommended vertical boarding installation on double subframe.

Joints and Abutting Boards

SAM TRIMAX will be mounted onto a subframe that comparatively shows significant expansion and shrinkage due to changes in temperature and/or humidity, which needs to be taken into account. Therefore, the cladding boards need to be installed with (at least) a 5mm gap to the other buildings' elements.

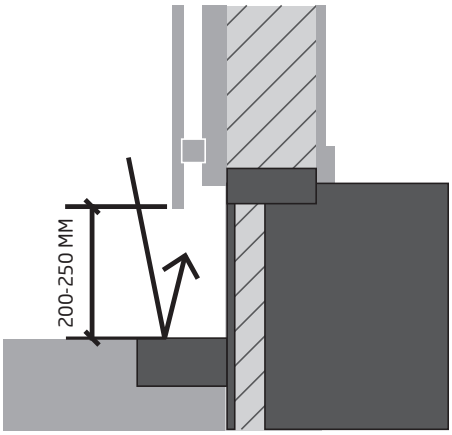
Where necessary double battens should be installed to fix abutting boards to the subframe. This is to ensure screws are within the required distance from the board end and that the screws are fixed correctly to the subframe. Abutting boards should be installed with a 1mm gap.

Cladding Installation Recommendations

Ground Detail

Although not a requirement for SAM TRIMAX, it is recommended as best practice and for aesthetic reasons that cladding boards are positioned on the façade in such a way that no direct contact with the soil can take place.

Furthermore, mounting the boards in the splash zone, between ground level and a height of 200 to 250mm, could lead to a reduction in service life of any coating or timber subframe, especially in the case of a paved surface, it is recommended to have a gravel section directly below the cladding.

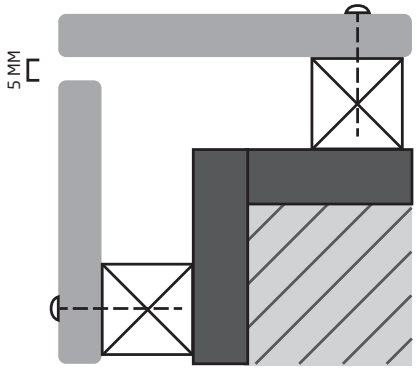


Recommended ground detail

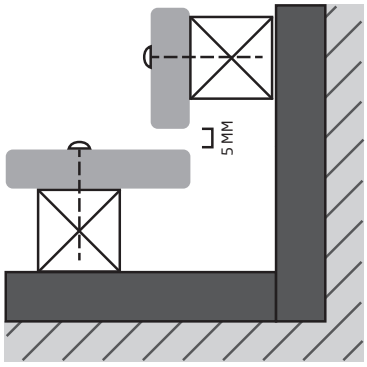
Corner Details

Corner solutions for SAM TRIMAX can be detailed in numerous ways, both with and without incorporating profiles.

It is best practice when a board meets another construction part (or another board) a gap of at least 5mm should be provided. Depending on the applicable national building code, to which you should refer, cavity barriers may be needed at corners.



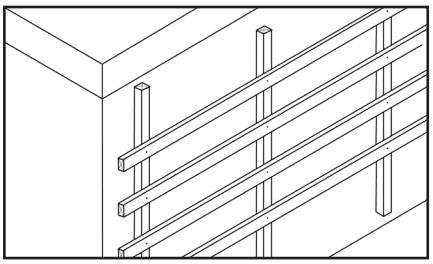
Typical external corner details



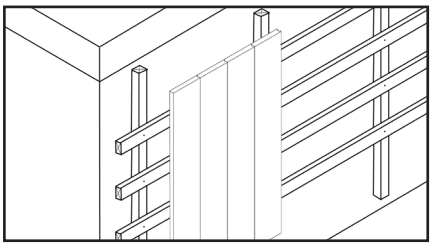
Typical external corner details

Cladding Installation Recommendations

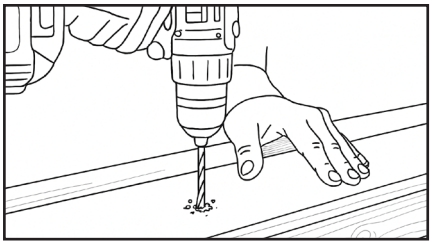
Installation



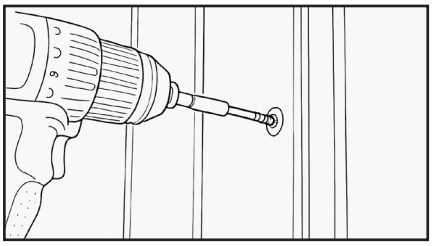
Horizontal battens to be placed at 400mm centres. Fixings to be positioned into the centre of the batten.



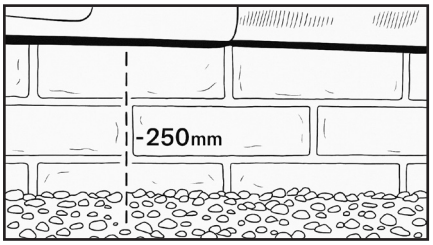
Profile slides together seamlessly.



SAM TRIMAX boards needs to be predrilled to a diameter 1mm larger than the screw shank diameter. The timber battens/sub frame should be predrilled with a pilot hole of 80% of the screw shank diameter.



Screws to be inserted. The screw must be minimum 35mm stainless steel type A2 or A4 quality for both 12 and 15mm products.



It is also recommended to have a 200-250mm clearance from the ground.

Painting and Finishing

SAM TRIMAX cladding products are offered as primed or fully finished.

Primed SAM TRIMAX consists of one coat applied via vacuum coater on all four sides of the boards. Primed SAM TRIMAX needs to be finished with a topcoat using an exterior graded paint. The paint manufacturer or supplier should be consulted to ensure the selected paint is compatible with primed SAM TRIMAX. For a neater finish, it is recommended to apply the finishing paint to the whole boards in a dry, dust free and ventilated environment before installation on site.

Fully finished SAM TRIMAX consists of the primed boards with a topcoat spray applied on the visible surfaces only when installed. Fully finished are available in three colours.

Some opaque paints contain calcium carbonate (chalk fillers) that may cause coating blistering on direct application to MTX and therefore should be avoided. Please consult with your paint manufacturer to ensure compatibility with the substrate.

You can download the PPG datasheet on our website.

Cut Edges

SAM TRIMAX boards will sometimes be cut to the required length or width during the installation.

In the case of fully finished SAM TRIMAX boards, any boards with cut edges for installation should be sealed using a suitable sealer or colour matching exterior grade paint. It is recommended to apply the paint on dry surfaces in a dry and ventilated environment.

In the case of primed SAM TRIMAX, for a neater finish, it is recommended to apply the finishing paint to the whole boards in a dry, dust free and ventilated environment. When all the boards are painted to the required finish then the boards should be installed as detailed in this document. Any cut edges then should be sealed with the same paint on dry surfaces and in a dry and ventilated environment.

Unpainted cut edges will not lead to the degradation of SAM TRIMAX base boards but could lead to a reduction of the durability of the finishing coating through moisture ingress in the boards. It is important to seal the boards fully during the installation by painting or sealing the cut edges.

Fixings

SAM TRIMAX must be face fixed onto the wooden subframe with a minimum 35mm length decorative low-profile screw with a woodscrew thread, made of stainless-steel type A2 or A4 (EN 10088-1) quality or AISI type 304 or 316 for both 12 and 15mm products. A4 quality should be used in challenging environments and high exposure level applications.

The use of staples or nails is not recommended when fixing SAM TRIMAX.

SAM TRIMAX needs to be predrilled to a diameter 1mm larger than the screw shank diameter. The timber battens/subframe should be predrilled with a pilot hole of 80% of the screw shank diameter.

Each board of SAM TRIMAX should be fixed to the battens of the subframe with two screws in each batten. The minimum distance of screws from the board edge should be 25mm and the minimum distance from boards end and corners should be 25mm.

SAM TRIMAX Fascia and Soffit

Complete your project with SAM TRIMAX fascias and soffits, designed to deliver both durability and aesthetic appeal. Available as standard, they come fully finished in a sleek Traffic White, ensuring a clean, professional look. Fascias and Soffits should be fixed following the recommendations in this document.

Fascia: Suitable for finishing the edges of the roof or eaves to shield the roofline from water ingress and provide structural support for roof tiles and gutters.

Soffit: Suitable for protecting the underside of roof eaves and overhangs, providing ventilation and a finished look.

Available in a standard thickness and length, with a choice of widths as detailed below.

	Fascia	Soffit
Finish	Fully Finished	Fully Finished
Thickness	15mm	12mm
Length	4880mm	4880mm
Width	175mm, 225mm	150mm, 225mm
Fully Finished Colour	Traffic White RAL9016	Traffic White RAL9016

Storage and Handling

1. The storage area must be dry with adequate ventilation to prevent dampness.
2. Boards should be stored horizontally and elevated off the ground using dry bearers as supports.
3. Storage on site should be a minimum of 100mm above concrete flooring and 300mm above ground.
4. Individual bearers should be of equal thickness and have a minimum length equal to the width of the board.
5. Ensure all bearers are vertically aligned.
6. Care should be taken when stacking boards to ensure flush sides to minimise damage to protruding edges or over-hanging corners.
7. It is recommended to cover the boards to prevent wetting during storage on site.

Maintenance

Cladding must be inspected as soon as possible after assembly. Any damage to paint films or joints must be repaired immediately so as to prevent moisture penetration that could lead to early coating degradation.

After installation, all SAM TRIMAX cladding must be inspected annually. All cladding, fascia & soffit boards will require minimal annual cleaning with water and mild detergent using a sponge or brush to remove any algae and/or dirt from the painted surfaces. Afterwards, minor damage must be repaired immediately.

When complete repainting is deemed to be necessary, this should be carried out after thorough cleaning of the whole cladding. Exterior graded paint should be used and recommendations from the paint suppliers should be strictly followed. For best performance the use of an adhesion primer may be recommended.