

m.look NCore Technique

USA/CANADA EDITION Release January 2018



for people who create

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FUNDERMA





USA/Canada

m.look NCore Exterior panels have proved compliance with sections 703.5.1 and 703.5.2 of the 2015 IBC for materials considered "Non Combustible" based on code requirements and passing the ASTM E136 test protocol.

Austria

Tested in accordance with ÖNORM B3800-5 for vertical facades, slanted



Technique

facades and soffits.

Requirements regarding fire protection are set out in the national building regulations and the OIB guidelines in the current version. For certain applications, proof of B 3800-5 (facade fire test) is required in addition to proof of Euro Class A2-s1, d0 in accordance with EN 13501-1.

For special constructions, we are happy to support you in clarifying and fulfilling the local building regulations.

Germany

National technical approval by the German Institute for Building Technology. Approval number: Z-33.1-1363

The requirements are set out in the national building regulations and the guidelines for special constructions such as school buildings, high-rise buildings, public buildings, metros, hospitals and airports.

Switzerland

Classification: A2-s1, d0

Current documentation on all standards and approvals relating to m.look NCore panels can be found in the internet at: http://www.mlook.at/en/technicaldetails.html. Please be certain to observe the applicable building regulations. FunderMax will assume no liability for a failure to do so.



ENVIRONMENTALLY FRIENDLY PRODUCTION

The fibers are impregnated with resins, dried and pressed under high pressure and heat into durable, moisture resistant, homogeneous panels. The exhaust air extracted during the drying is treated by regenerative thermal oxidation and the resulting heat is again reintroduced into the process. FunderMax received the "climate:active" award as best practice from the Austrian Energy Agency and the Federal Ministry for the Environment for the installation of this efficient air treatment system. The production plant can thus reduce its emissions by approximately 10,000 tons of CO² per year.

NATURAL RESOURCES

FunderMax m.look NCore panels consist primarily of natural mineral resources that are available in unlimited quantities. Mineral fibers give the panel the appropriate strength and the proven resins render it moisture resistant and durable.

DURABLE AND MAINTENANCE-FREE

Extensive tests certify the exceptional durability of FunderMax m.look NCore panels. The production process ensures a highly weather resistant and ultraviolet stable surface.

FunderMax m.look NCore panels do not require any maintenance to ensure a long service life. The surface of the panels is highly resistant to soiling. If necessary, they can be cleaned with standard cleaning agents. It is not necessary to seal the edges, even after cutting. The edges will take on their natural color after a short period of time.

ENVIRONMENT

Environmental objectives are fulfilled both for new construction, as well as for the renovation of existing buildings, through the use of drained and back ventilated facades. The measurable reduction in energy required for heating minimizes the carbon dioxide emissions, one of the greatest causes of environmental pollution. State and regional subsidy programs are still available for energy-saving facade renovations.

DISPOSAL AND RECYCLING

The cuttings or dust from machining can be disposed of just like any other building material.





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FunderMax m.look NCore is an architectural facade panel with a heavy duty, reinforced mineral fiber, noncombustible core with a highly weather resistant decorative surface. The decorative surface is characterized above all by high abrasion resistance, light fastness, impact resistance, anti-graffiti properties, ease of cleaning and hail resistance. FunderMax m.look NCore panels have proved compliance with sections 703.5.1 and 703.5.2 of the 2015 IBC for materials considered "Non Combustible" based on code requirements and passing the ASTM E136 test protocol.

Surface

NT

Format

3660 x 1630 mm (approx. 144 3/32" x 64 3/16") Tolerances - 0 / +10 mm

Panel dimensions are production dimensions. It is recommended to cut all sides of the panel if precise dimensions and angles are required. Depending on the cut, the net mass is reduced by approx. 10 mm.

MATERIAL PROPERTIES

m.look NCore panels expand and contract slightly due to relative humidity. When working with and using m.look NCore panels in construction, these possible dimensional changes must be taken into consideration. The dimensional change for m.look NCore panels is generally about 30% less in the longitudinal direction than it is in the transverse direction (longitudinal direction relative to the standard panel dimensions).

Element length = aElement width = b

 $\frac{\text{a or b (in mm)}}{500} = \text{Allowance for exp.}$

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Classification

Non Combustible per ASTM E136 FSI=0, SDI=10, as tested per ASTM E84

Thickness	7.0 mm
	9.0 mm available
Panels with dou	uble-sided decorative
design, tolerand	ce ± 0.4 mm









PANEL DIMENSIONS	TEST METHOD	TOLERANCE VALUES		UNIT
ength		- 0 / +10 mm	3.660 (approx. 144 3/32")	mm (ft)
Width		- 0 / +10 mm	1.630 (approx. 64 3/16")	mm (ft)
Thickness		+ 0.4	7.0	mm
Flatness	EN 438-6:2016,5.3	≤ 5	≤ 5	mm/m

TYPES	TEST METHOD	TOLERANCE	VALUES	UNIT
Decors			based on the current range of decors	
Cut length/width		+ 0.5		mm
Machining (drilling, milling, CNC)			on request	
Surface texture			NT	
Substructure			Aluminum, steel	
Fastening spacings			up to 32/20.1 inch in accordance with the structural standard for the panel type See page 14 for wind load tables	
Joint width			8 ±1	mm

PHYSICAL PROPERTIES	TEST METHOD	STANDARD VAL- VALUES UES		UNIT
Fire resistance	ASTM E 136 PASS ASTM E84		Non Combustible FSI = 0; SDI =10	
Surface protection		Weather protection, consisting of patent- ed, double hardened acrylic polyurethane resin		
Resistance to artificial weathering	EN 438-2:2016,29		≥ 4	Gray scale
Resistance to scratching (surface hardness)	EN 438-2:2016,25		≥ 3	Degree
Flexural strength	EN ISO 178	-	≥ 5511	PSI
E-Module	EN ISO 178	-	≥ 1087782	PSI
Basis weight (7 mm)		-	2.54	lbs/SF
Density	EN ISO 1183-1	-	1.8	g/cm ³
Thermal resistance	EN 12667	-	0.0327	m²K/W
Freeze/thaw cycle test	EN 438-2:2016,19	-	passed	
Thickness swelling 24 hours	EN 317	-	< 0.1	%

PHYSICAL PROPERTIES	TEST METHOD	STANDARD VAL- UES	VALUES	UNIT
Formaldehyde emission	EN 717-1	≤ 0.1	≤ 0.1	ppm
VOC emission (TVOC)	AgBB	≤ 1.0	0	mg/m ³
Disposal			Same as for other building materials	

Table 1

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Function and advantages of a non-bearing, rear-ventilated facade.

PROTECTION AGAINST RAIN

FunderMax promotes the use of drained and back ventilated rain screen systems which have become adopted across the globe for their efficiency and effectiveness. Panelized cladding provides aesthetic and functional benefits to the building envelope through driven rain moisture management and in combination with exterior insulation provides improved thermal performance of the building envelope.

Approved brands of Foam plastic insulation may be used behind m.look NCore panels as well as mineral wool insulation.

PROTECTION AGAINST NOISE

Depending on the thickness of the insulation layer, dimensions of the panels and the proportion of open joints, noise protection can be increased by up to 14 dB.



Fig. 2



INSULATION

The non-bearing, ventilated facade (VHF) system can be designed for different energy requirements with an individually calculated insulation. Thus, any desired insulation thickness can be used. This means insulation values typical of lowenergy, passive-energy or activeenergy buildings and comply with the current energy savings regulations can easily be achieved.

Based on the energy needs, the insulation maximizes the heat retention of the building. High summer temperatures in the interior of the building are regulated. By reducing the amount of energy needed for heating, the non-bearing facade minimizes the carbon dioxide emissions of the heating system.

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PROTECTION AGAINST CONDEN-SATION WATER

The construction of the non-bearing, rear-ventilated facade decreases the vapor diffusion resistance from the interior to the exterior of the buildina: Moisture from the construction or use of the building is removed through the rear-ventilation space. Thus the lasting function of the insulation can be ensured and makes a significant contribution to a pleasant and healthy indoor climate.





ECONOMY

The economic aspects can also be found again in the requirements of sustainable construction. Longevity and long maintenance intervals are the essential key points.

COST CERTAINTY

The non-bearing rear-ventilated facades enable exact cost planning, even for renovations.

GENERAL CONSTRUCTION INFORMATION

During construction and installation, ensure that the material is not exposed to standing water, i.e. the panels must always be able to dry. m.look NCore panels may exhibit planar deviations. These should be corrected though a stable, level substructure. All connections to other components or the subsurface are to be force-fitted. Elastic intermediate layers between the panel and the substructure, as well as between parts of the substructure, that allow a tolerance of greater than ± 0.5 mm are absolutely to be avoided.

ADVANTAGES OF THE NON-BEARING, REAR-VENTILATED FACADE

- Architectural accents can be achieved through various design and joint patterns
- Long-term value retention and appreciation of the building
- Exact cost estimation of the facade
- m.look NCore provides a long lasting facade with minimal maintenance - no surface repainting as with other cladding materials
- Installation under any weather conditions
- Can be installed on virtually any surface
- Savings through the shorter scaffolding times

Technique

Installation of m.look NCore panels with Screws or Rivets on an Aluminum substructure.

SUBSTRUCTURE

The aluminum substructure must meet the requirements of the national standards and is to be installed according to the manufacturer specifications for the substructure.

The aluminum substructure basically consists of vertical profiles installed on the wall. Due to the material properties of m.look NCore panels, fixed points and sliding points are required to mount the panels (Fig. 2). The dimensions of metal substructures vary with changes in temperature (p. 13, Fig. 3 and 4). However, the dimensions of m.look NCore panels vary with changes in relative humidity. These dimensional changes in the substructure and wall panel materials may be in opposite directions. It is therefore essential to ensure there is sufficient expansion space when installing m.look NCore panels.

NOTE:

FUNDERMAX M.LOOK NCORE PANELS USE ONE FIXED POINT PER PANEL AND THE BALANCE OF THE HOLES MUST BE OVERSIZED AS "SLIDING POINTS"





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FASTENINGS

SX3 #12-11 TORX® Drive 304 Austentic Stainless Steel Self-drilling BiMetal Fastener

APPLICATION

Metal to Metal SX3-D16 (304) austentic stainless steel fastener with carbon steel drill point

Drive: T-25 TORX® Head Dia.: .640 - .620". Thread Major Dia.: .220 - .212" Thread Minor Dia.: .165 - .157" Drill Capacity: .118 - .060" Nom. Tensile: 1900 lbs Nom. Shear: 1620 lbs Min. Torsional: 80 lb-in

POTENTIAL STRENGTH IN APPLICATION (POUNDS ULTIMATE)

PULL OUT STRENGTH (LBS) IN 55 KSI YIELD SHEET STEEL 12ga (.105"): 1715 14ga (.075"): 1032 16ga (.060"): 696

AVAILABLE SIZES (Lengths) and SFS Part Number SX3/15-D16-5,5 x 30 12 x 1-3/16"

LENGTH SELECTION

Application thickness of panel and substructure should be no thicker then 15mm (.590") to allow for the stainless steel section of the fastener to be positioned in the substructure

INSTALLATION AND APPLICATION CONSIDERATIONS Install fasteners with 0-2000 RPM screw driver equipped with depth sensing nose

piece. 04/15



PERFORMANCE DATA

Material Strength Tensile 2442 lbf / 10863 N Shear 1620 lbf / 7206 N Torsional 80 lbf*in / 9.04 N*m

Pull Out Strength Steel

12 Ga (2.7mm): 1715 lbf / 7629 N 14 Ga (1.9mm): 1032 lbf / 4591 N 16 Ga (1.5mm): 696 lbf / 3096 N

Pull Out Strength Aluminum

2.2mm L or T Rail (0.087")*: 672 lbf / 2989 N 2.4mm Omega or Zed Rail (0.094")*: 590 lbf / 2624 N 2.5mm L or T Rail (0.098")*: 800 lbf / 3559 N 1/8" 6063-T5 (3.2mm): 1183 lbf / 5262 N

HANDLE FOR CENTERED DRILL SCREW

ZL-SX/SD-5,5/8,0 Art.: 774499 Hole: Ø 8-11 mm Screw: Ø 5,5 mm



ZL-SX/SD-5,5/8,0

Fig. 4

AP16 RIVET

Attach high-performance cladding panels to aluminum or steel sub-frames

Material: Body: Aluminum AlMg5 Mandrel: Stainless Steel A3

Nom. Tensile: 3720 N (836 lbs.) Nom. Shear: 2414 N (543 lbs.)

Pull-out Strength - Extruded Aluminum AIMg 1.8 mm (.071"): 2410 N (542 lbs)

Pull-out Strength - 33 KSI Yield Sheet Steel 22 ga. (030"): 1210 N (272 lbs.) 18 ga. (.048"): 2360 N (530 lbs.)

Installation

5.1 mm (0.201") pilot hole required in aluminum framework for fixed point. All other holes depend on material. Check the attachment method instructions provided by the cladding panel manufacturer.



Fig. 1



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EDGE SPACINGS

It is absolutely necessary to observe the edge distance of 30 mm in order to ensure stability and flatness. In order to accommodate dimensional changes, the joints between the panels must be 8 ±1 mm (p. 10, fig. 2).

SLIDING POINT

The drill hole diameter for m.look NCore panels should be 3/8". The head of the fastening means must always cover the hole. The fasteners are to be set such that the panel can move. Screws must be set centrally using a screw placement guide. Screws must not be overtightened. The center of the hole in the substructure must line up with the center of the hole in the m.look NCore panel. The appropriate drill guides should be used. The panels should be fastened from the middle outwards.

FASTENING SPACINGS

The fixing distance is to be selected in accordance with the structural requirements (calculations) or, if this is not necessary due to local building codes, from Tables 1 and 2, p. 14. The fixing distances are to be smaller in the peripheral area of the building than in the central area (pressure, suction/Fig. 2, p. 12).

FIXED POINT (ONE PER PANEL)

Fixed points serve the uniform distribution (halving) of the swelling and shrinkage movements. The drill hole diameter for m.look NCore panels 13/64" for panels fastened with rivets, and 7/32" for panels fastened with screws.

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Exposed Fastener Panel System Wind Load Charts: Wall Condition

Panel Thickness: 7 mm

		Wind Pressure (psf)					
No. of Fasteners		25	30	35	40	45	50
1 into Aluminum extrusion	x-spacing (in)	32	32	32	32	32	32
	y-spacing (in)	20.1	16.7	14.3	12.5	11.2	10.0
	x-spacing (in)	24	24	24	24	24	24
	y-spacing (in)	23.1	21.1	191	16.7	14.9	13.4
	x-spacing (in)	16	16	16	16	16	16
	y-spacing (in)	25.2	24.0	23.2	22.4	21.1	20.0

Table 1

Exposed Fastener Panel System Wind Load Charts: Soffit Condition

Panel Thickness: 7 mm

		Wind Pressure (psf)					
No. of Fasteners		25	30	35	40	45	50
1 into Aluminum extrusion	x-spacing (in)	32	32	32	32	32	32
	y-spacing (in)	16.5	15.4	13.4	11.8	10.6	9.6
	x-spacing (in)	24	24	24	24	24	24
	y-spacing (in)	16.5	15.8	15.2	14.8	14.1	12.7
	x-spacing (in)	16	16	16	16	16	16
	y-spacing (in)	16.5	15.8	15.2	14.8	14.4	14.0



NOTE:

1. CHART UTILIZES AAMA TIR-A9-14 TABLE 22.4 FOR THE ALLOWABLE PULLOUT OF #12 SCREW INTO 6063-T5 1/8" ALUMINUM

2. CHART ALSO UTILIZES FUNDERMAX TEST DATA FOR ALLOWABLE PULLOUT/PULL-OVER OF AP16 RIVET. SEE APP. B

3. CONNECTION OF ALUMINUM J-EXTRUSION OF WOOD BATTEN TO SUBSTRATE BEYOND MUST BE ENGINEERED BY OTHERS.

Table 2







ALUMINUM SUBSTRUCTURE

Fig. 2

Construction-details horizontal sections Aluminum-substructure screwed or riveted





Construction-details vertical sections Aluminum-substructure screwed or riveted



TOP OF WALL A109



WINDOW HEAD A101

NOTE: PERFORATED SCREENS (MIN. 40% PERFORATION) MAY BE USED.





BASE CONNECTION A103

m.look NCore panels can be mounted as panels for balconies or railings.

BASICS

During construction and installation, care is to be taken that the material is not exposed to standing water. This means that the panels must always be able to dry out.

Connections of m.look NCore panels to one another always have to be made in the same panel direction. m.look NCore can show deviations from being flat (see EN 438-6, 5.3), and this is to be compensated for by the sub-construction being executed so that it is stable and flat. All connections to other components or to the background must be executed firmly. Elastic intermediate spacers to the sub-construction elements and also between sub-construction elements which permit a greater tolerance than ±0.5 mm must definitely be avoided. m.look NCore panels can be mounted with rivets or screws. Due to the material properties of m.look NCore panels, fixed point and sliding points need to be made to mount the panels (see page 10, fig. 2).

TECHNICAL NOTES

The substructure is to be protected against corrosion regardless of the material or system used. Anchoring elements for installation on walls or for installation of the panels must be suitably dimensioned to withstand the local wind loads and meet the local structural requirements. Verifications are to be submitted to the client. The necessary space for expansion according to the manufacturer's recommendations must be taken into account when installing m.look NCore panels.

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PANEL JOINTS

The joints must be made at least 8 mm wide so that changes in size can take place without hindrance.

SLIDING POINT

= SLIDING POINTS

S = FIXED POINTS

The diameter of the drill hole in m.look NCore must be drilled with 3/8". The head of the fastening must be big enough so that the drill hole in the m.look NCore panel is always covered. The fastening is placed in such a way that the panel can move. Rivets are put in place with flexible mouth-piece. The defined clearance of the rivet head. allows movement of the elements in the drill hole. Clearance + 0.3 mm. The center point of the drill hole in

the sub-construction must coincide with the center point of the drill hole in the m.look NCore panel. Drill with a Centering piece! The fastenings should be put in place starting from the middle of panel outwards.

FIXED POINT

Fixed points are used for uniform distribution (halving) of the expansion and shrinkage movements. The diameter of the drill hole in m.look NCore is the same size as the diameter of the fastening.

All local building codes must be strictly adhered to when installing m.look NCore panels in balcony applications.





AP16 RIVET

Attach high-performance cladding panels to aluminum or steel sub-frames

Material: Body: Aluminum AlMg5 Mandrel: Stainless Steel A3

Nom. Tensile: 3720 N (836 lbs.) Nom. Shear: 2414 N (543 lbs.)

Pull-out Strength - Extruded Aluminum AIMg 1.8 mm (.071"): 2410 N (542 lbs)

Pull-out Strength - 33 KSI Yield Sheet Steel 22 ga. (030"): 1210 N (272 lbs.) 18 ga. (.048"): 2360 N (530 lbs.)

Installation

5.1 mm (0.201") pilot hole required in aluminum framework for fixed point. All other holes depend on material. Check the attachment method instructions provided by the cladding panel manufacturer.



Especially, in some circumstances, when refurbishing with very uneven subconstructions, it is important to have the front panel protrude about 10 mm in front of the side panel. In this way, inaccuracies can be concealed from the main viewing side.

1.5

16 Ø

L

RAILINGS

The variations in the given geometry can also be designed for railings. The railing or handrail heights are to be designed in accordance with local building codes, and in addition it must be ensured that the construction does not create any climbing assistance.



Balcony system with horizontal belts. Riveted m.look NCore panels. Riveting as described on this page



Panel thick- ness in mm	Maximum fastening spacing		Projecting ends E		
7 mm	А	200 mm	20 120 mm		
/ 111111	L	800 mm	20 - 120 11111		
0 mm	А	400 mm	20 200 mm		
911111	L	800 mm	20 - 200 mm		

F1 ≤ 15 mm F2 ≤ 45 mm

PLEASE CONTACT US FOR ADDITIONAL INFO AND DETAILS FOR BALCONY PANEL INSTALLATIONS

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Table 1

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Transport and Handling

To avoid damaging the edges and surfaces of the high quality material, it should be handled with care.

Two people are required to safely install panels larger than 2,000 x 1,000 mm (78.74" x 39.37"). Ensure the panels are kept clean and free of dirt and grit in order to avoid damage to their surfaces.

Weight: 2.54 lbs/SF

FunderMax m.look NCore panels must be secured to prevent shifting during transport. The panels must be lifted when they are loaded or unloaded. Do not pull or push them over the edge of the stack!

m.look NCore panels will be delivered with a protective film on both sides.

Protective films must always be removed from both sides at the same time. The protective film must not be exposed to heat or direct sunlight for extended periods of time.





ALWAYS CARRY THE PANELS VERTICALLY WITH TWO PEOPLE.





ALWAYS PLACE THE PANELS ON A FLAT SURFACE



DO NOT LEAN THE PANELS UPRIGHT



DO NOT CARRY THE PANELS HORIZONTALLY!

Fig. 7

Fig. 8

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PALLET HANDLING

When transporting and lifting the pallets it is essential to use an appropriate forklift with wide forks or a crane with lifting points uniformly distributed along the length of the pallet. Do not stack pallets of cut panels.



PROPER FORKLIFT TRANSPORT



IMPROPER FORKLIFT TRANSPORT

Fia. 10

Storage and Conditioning

FunderMax m.look NCore panels must be stacked horizontally on flat, stable supports and supporting panels. The goods must lie completely flat.

Always leave the stack of panels covered. The cover should be weighted to keep it in place.

After removing any panels, the PE film must be closed over the stack again. The same applies for stacks of cut panels.

Improper storage can lead to permanent deformation of the panels.

FunderMax m.look NCore panels should be stored in closed rooms under normal climate conditions. Climate differences between both sides of the panel should be avoided.



PROPER CRANE TRANSPORT



DO NOT STORE PANELS OUTDOORS



ALWAYS PACK THE PANELS IN PE FILM



IMPROPER CRANE TRANSPORT





ALWAYS STORE PANELS ON A LEVEL SURFACE

Fig. 14



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ALWAYS STORE PANELS ON A LEVEL SURFACE AND KEEP COVERED

Machining m.look NCore Panels

GENERAL

We are happy to cut the panels to your specifications, including interior cutouts. For finishing cuts, please refer to the information below.

The surface of the FunderMax m.look NCore panel consists of double hardened resins resulting in non-porous, highly durable surfaces.

Finishing cuts on site must be performed with diamond-tipped tools. Sharp blades and smooth running tools are required to ensure proper machining. Improper handling or the use of unsuittable tools may result in the breaking, splintering or chipping of the decorative side of the panel. Tables should be smooth and preferably without joints to ensure that no debris can get embedded there where they might damage the surface of the panel.

All the machining equipment should be designed with sealed bearings. In order to avoid chipping the edges,

it is necessary to chamfer them with a sanding block (45 degrees, approx. 0.25 mm).

Please be sure to observe the standard safety rules when machining m.look NCore panels and to wear proper safety gear such as gloves, long clothing, protective goggles, ear protection and dust protection.

SAFETY PRECAUTIONS

This is a list of the recommended personal protective equipment (PPE). The appropriate personal protective equipment required by health and safety regulations (long-sleeved work clothes, safety shoes, hair net, etc.) should always be worn when working with FunderMax m.look NCore panels.

PROTECTIVE GOGGLES

When machining FunderMax m.look NCore panels with tools that create shavings or chips, please be sure to wear tightly fitting protective goggles.



EAR PROTECTION

When machining FunderMax m.look NCore panels the noise levels may exceed 80dB(A). Please be sure to always wear adequate ear protection when machining m.look NCore panels.



GLOVES

Non-chamfered cut edges are sharp. There is a risk of injury. It is recommended to wear category II protective gloves with at least category II cut resistance when handling freshly cut FunderMax m.look NCore panels.

DUST PROTECTION

Machining FunderMax m.look NCore panels must be performed with suitable dust extraction to keep the work place dust free. Dust from machining the panels may lead to mechanical irritation of the skin and mucous membranes. Adequate respiratory protection (e.g. disposable dust mask P1) must be worn when machining the panels.



DRILLING

Solid carbide spiral or dowel drill bits should be used. At machining centers it is recommended to use an insert in the main spindle instead of in the drilling head at a speed of 2,000 - 4,000 min-1 and feed speed of 1.5 - 3 m/min. The exit speed of the drill must be selected such that the surface of the m.look NCore panel is not damaged. Just before the drill exits the rear side of the panel in its full diameter, the feed rate should be reduced by 50%. When drilling holes all the way through the panel, be sure to use a suitable base to ensure there is sufficient counterpressure.



LEITZ-DRILL BIT 10 MM



LEITZ-DRILL BIT HW-SOLID, Z2



MBE VHM (CARBIDE) FACADE DRILL BIT

Installation

GENERAL

Avoid placing the panels on hard, stony surfaces. Suction handles can be used to place the panel in the correct mounting position (p. 24, Fig. 3). The recommended joint spacing of 8 ± 1 mm between the panels can be achieved with spacers. We recommend using smooth spacers.

MACHINING

We are happy to provide prefabricated panels. To perform optimal final cuts, we recommend using a circular saw with (p. 24, Fig. 4) dust extraction. Please observe the safety instructions on page 22. The center of the hole in the substructure must be aligned with the center of the hole in the m.look NCore panel. We suggest using suitable drill guides (centering tool MBE, SFS) (p. 24, Fig. 5). We recommend diamond-tipped core drills for drilling drill holes (p. 24, Fig. 6).

TOOLS REQUIRED FOR INSTALLATION





CORDLESS SCREWDRIVER

Fig. 1





SUCTION HANDLE



DRILL CENTERING TOOL

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Fig. 3



DIAMOND-TIPPED CORE DRILL



ELEMENT SIZES

For installation by hand, the recommended m.look NCore panel size is 2,000 x 1,000 (78.74" x 39.37") mm. This size panel can easily be installed by two people. We recommend carrying the panel vertically (see p. 20, fig. 1).

For larger sizes, we recommend installing the panels with lifting equipment (p. 20, fig. 3).



FINAL CUT



SPACER FOR ENSURING PROPER JOINT SPACE



PRE-DRILL PANEL



PLACE PANELS WITH SUCTION HANDLES



FIXING THE PANEL WITH SCREWS

Fig. 5

Fig. 6

Cleaning steps for m.look NCore panels

For removing dust vacuum clean the surface and wipe off residual dust with a clean, dry cotton cloth. Finally wipe with a damp cloth.

For removing any other contamination please follow the cleaning steps until the desired cleaning effect.



STEP 1

Clean the surface with clean hot water and a soft sponge (DO NOT scrub the surface with the "green" side of the sponge), a soft cloth or a soft brush (e.g. a nylon brush).

STEP 2

If there is any dirt that can not be removed with a sponge and warm water, you can use normal, nonabrasive household cleaners such as dishwashing detergent (Palmolive, Fairy) or glass cleaner (Ajax, Frosch). Perform a final cleaning.

STEP 3

If there is still any dirt that can not be removed, use a solution of soft soap and water (1:3). If the dirt is particularly stubborn, let it soak for a while. Perform a final cleaning.

STEP 4

If any dirt is still remaining, you can repeat step 1 using organic solvents (e.g. acetone, ethyl alcohol, lacquer remover, turpentine). If there is any dirt that still can not be removed, you can try scraping it off physically. Caution: To avoid scratching the panels, use a plastic or wooden spatula. Perform a final cleaning.

STEP 5 (FOR ADHESIVES, PAINTS, SEALANTS OR SILICONE RESIDUES)

Rub the surface with a soft dry cloth or a soft dry sponge. If the material still can not be removed, use silicone remover (for example from Molto) or ask the manufacturer of the adhesive for the ideal cleaning agents.

Caution: Hardened adhesive, twocomponent paints, foams, and sealant can NO LONGER be removed.

STEP 6

If the panel is still dirty you can repeat step 1, using liquid cleaner with polishing chalk (CIF, ATA). Only use liquid cleaner with polishing chalk sparingly! For extremely stubborn lime deposits you can also use acidic cleaning agents (e.g. 10% vinegar or citric acid). Perform a final cleaning.

FINAL CLEANING

Completely remove any remaining detergent to avoid streaking. Finally, wash off with clean water and dry. Wipe the surface dry with an absorbent cloth or paper towel.

When cleaning with solvents: Observe the safety regulations! Always work with an open window! Do not work near any open flames!

Hint for final cleaning

Note, that contaminants (e.g. drilling and machine oil, grease, adhesive residues, etc.), which are put on the surface of the m.look panels during the storage, mounting and the application must be immediately removed residue-free. We recommend the use of non-greasy sunscreens (for example Physioderm Physio UV 50 Spray), when using conventional sunscreen even with immediate cleaning a complete removal is not guaranteed.

If the above recommendations are not followed then no claims regarding the color, finish and surface will be accepted.





Fastenings: (mechanical)

North America

SFS Group USA, Inc., **Division Construction** 1045 Spring St. & Van Reed Rd US-Wyomissing, PA 19610 T +1 610 376 5751 E-Mail: us.construction@sfsintec.biz www.sfsintecusa.com

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FUNDERMAX NORTH AMERICA, INC. 2015 Ayrsley Town Blvd. Suite 202 Charlotte, NC 28273, USA Tel.: +1 980 299 0035 Fax: +1 704 280 8301 office.america@fundermax.biz www.fundermax.at

FunderMax GmbH Klagenfurter Straße 87–89 A-9300 St. Veit/Glan

Tel.: + 43 (0) 5 / 9494-0 Fax: + 43 (0) 5 / 9494-4200 mlook@fundermax.biz www.mlook.at

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