

# **RAPHA Stone**



## The RAPHA Stone

Rapha Systems of Austria is pleased to introduce a new flexible slate "veneer". This 1-2 mm thin, flexible natural stone opens up exciting new design possibilities for architects, and the woodworking and millwork industry. The ability to process the stone veneer with standard woodworking tools means almost unlimited possibilities for woodworkers. For example, the combination of stone and wood creates a new premium look for the furniture industry. It can be used and processed in kitchens, bathrooms and in the whole living area.

With RAPHA stone, every carpenter and woodworker has the opportunity to present the look of genuine stone!



### Applications of RAPHA Stone

RAPHA Stone is ideal for furniture production, with many design possibilities:

curved surfaces and columns, metal, lacquered surfaces, concrete, wood, plywood, particle board, ceramic tile, drywall, MDF, doors, furniture and other surfaces.

- RAPHA Stone is ideal for furniture production, with many design possibilities for new products due to the lightweight characteristics, and the flexibility as well as the ease of processing.
- Rapha Stone may be used in applications where portability and weight are critical, such as Exhibition walls, displays and floors, plus marine and Recreational Vehicles.
- The RAPHA Stone colour scale shows the amazing variety of colours of this natural stone - with over 12 different styles of slate, quartzite and sandstone.
- RAPHA Stone can be used in the automotive industry, rail, yachts, retail shops, offices, and elevators.
- All products produced with RAPHA Stone will have an individual and unique look.

## **RAPHA Stone's flexibility**

RAPHA Stone can be used and processed in the same way as thin veneer or laminate products. With the assistance of heat (about 65 C - 85 C), it is possible to achieve even tighter radii. The RAPHA Stone can be cambered or curved inwards or outwards to create a specific architecture. It is recommended to determine the minimum radius in advance, as the different products have different minimum radii.



## Technical data

#### **RAPHA Stone - Description**

It is a true stone veneer created by splitting blocks of slate. Thin layers of approximately 0.1 to 2.0 mm are split from big, random sized rock sheets. Glass fiber reinforced polyester resin (FRP) bonds and holds the sheets intact.

The rough split surfaces and the ever changing colour variations in each layer means the individual sheets are unique, and dramatic.

#### Base and balancing materials

The base material must meet the specific application. All wood and lightweight materials are suitable. If the RAPHA Stone is only applied on one side of a carrier material, it is important to have a counter balance on the other side for stability. Mechanically mounted panels which have the RAPHA Stone on one side, need a craft paper or foil of at least 150 g/m<sup>2</sup> to 200 g/m<sup>2</sup>. If applied as floor or wall panels, different climate conditions have to be taken into consideration.

#### Gluing

The backside of the RAPHA Stone is treated with polyester backing. It is now possible to glue these sheets with common dispersion glues, hot melts and PUR glues onto a variety of carrier materials such as wood, fiber cement boards and gypsum panels. For water resistant applications we recommend to apply a one or two component PUR adhesive (without the special fleece) onto the polyester backside.

Please refer to the adhesive manufacturers technical data sheets.

#### **RAPHA Stone peel & stick**

RAPHA Stone is pre-pressed on to a self-adhesive foil. Easy to use, for all kinds of wall and ceiling applications.

#### Pressing

RAPHA Stone has a natural, rough stone surface with a variation of up to 2 mm. To compensate for tolerance during the pressing in the press, we recommend a silicone membrane to compensate for the height variations of RAPHA Stone. During pressing, it is important to ensure the compression pressure is carefully selected. The pressing time depends on the chosen glue or adhesive, substrate and temperature.







#### **Tooling requirements**

RAPHA Stone has thin stone layers and can be cut with standard saws, equipped with a special laminate blade. Due to the thin stone layer and the fiber cover on the backside, the down time of the saw is reduced.

If RAPHA Stone has been applied to both sides of a panel, it is recommended that the reverse side be scored to avoid splintering. Routing the panels is also a quick solution. For bigger production runs it is recommended to use diamond tools. Commonly used machine cutting speeds in the woodworking industry cannot be exceeded. Dull tools, excessive speed or feed rates will lead to heat from friction, which cause melting of the polyester backing.

RAPHA STONE can also be cut with standard long nose metal scissors, water-cooled saw with a diamond blade, circular saws with a carbide blade, masonry disc or metal shears. The cutting of curves works best with long nose shears or on a CNC cutting machine.

#### **Surface treatment**

RAPHA Stone with its' real stone surface is porous, and has the natural look of slate and includes the colours of various minerals. We recommend a sealer to protect this natural look of RAPHA Stone. After processing or installation, apply a protective coating or seal. RAPHA offers different solutions for the stone surface protection – for example "super mat" or "silk mat" protection for high stress surfaces. These coatings or sealings are applied lightly with a brush, rag or sponge. Flameproofing is also possible by the application of a special chemical.





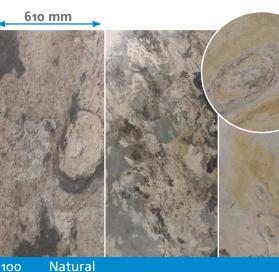
Stone for projects which have certain fire safety requirements.

## Types and sizes

RAPHA has the technical equipment such as presses, CNC routers, BAZ processing centres and edge banding machines in order to supply RAPHA Stone as a finished product. We can also manufacture components with all required elements such as profiles, edging and drilling per your requirements.

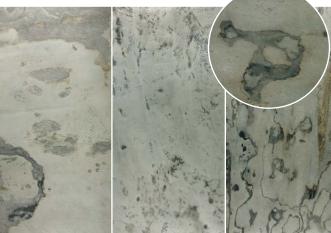
The weight of RAPHA Stone is approximately 1.2 to 1.6 kilograms per square meter (approx  $\frac{1}{2}$  lbs per sq foot).

**RAPHA Systems offers a con**tracting service to produce **RAPHA** Stone components, which are laminated to your specific requirements and designs.



The images illustrate the natural range of colours and

structures of the individual products. The images show the area of the size of 610 x 1220 mm. This format is the standard size, larger sizes are available on request.



Natural white





**Bronce shine** 200



Natural gold 180

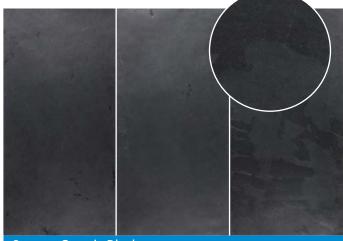






400 Color Mix





800 Cosmic Black





500 Green nature



700 Red nature



Further variants of sandstone and processing instructions you will find on our website www.rapha-systems.at.

## **Request RAPHA Stone product samples!**

Please send this form via fax to +43 07488/7113312 or send it by post to RAPHA-Systems Handels GmbH, Griesperwarth 3-4, A-3262 Wang, Austria. We will send then in short time the RAPHA Stone sample brochure.

Company:	
Name:	
Street:	
Postal Code:	City:
State:	
Tel:	
Fax:	
E-Mail:	





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