



Technical Data Sheet: SUPERFLEX Stone Veneer Sheet

1. Product Overview:

Introduce the SUPERFLEX stone veneer sheet and its purpose, highlighting its benefits and potential applications. Describe its thin and lightweight nature, designed to replicate the appearance of natural stone while offering greater flexibility.

Emphasize its versatility and adaptability for both interior and exterior applications, such as wall cladding, furniture covering, countertops, and decorative elements.

2. Material Composition:

Provide details on the materials used to create the SUPERFLEX stone veneer, such as natural stone types (e.g., slate, quartzite, mica, or limestone) and bonding agents (e.g., polymer resins). Explain how these materials are combined to achieve the desired properties of the product.

Mention any additional additives, reinforcements, or backing materials used to enhance the sheet's performance and durability.

3. Physical Properties:

Describe the dimensions and thickness of the sheet, typically ranging from 0.5mm to 2mm (or more) in thickness. Specify the standard sheet size (e.g., 1220mm x 610mm, 1220 x 2440mm) or variations available.

Mention the weight per square meter or square foot, which is significantly lighter than traditional stone materials, reducing structural load and transportation costs.

Highlight its flexibility and bending capabilities, allowing it to conform to curved surfaces and irregular shapes without cracking or breaking.

Explain its high tensile strength and tear resistance, ensuring that the sheet can withstand handling, transportation, and installation without damage.

Mention the typical surface finish (natural, honed, textured, etc.) and variations available, catering to various design preferences.

4. Performance Characteristics:

Discuss the sheet's resistance to impact, abrasion, and weathering, making it suitable for both indoor and outdoor applications in various climates.

Specify its dimensional stability, ensuring minimal expansion and contraction with temperature changes, preventing warping or distortion over time.

Highlight its resistance to moisture, making it suitable for use in wet areas like bathrooms, kitchens, and outdoor settings.

Discuss its resistance to UV radiation, ensuring the product's color stability and longevity even when exposed to direct sunlight.

Mention its thermal conductivity properties, which may differ from natural stone, affecting its behavior under temperature changes.

5. Installation and Application:

Provide detailed instructions for proper handling and storage of the flexible stone veneer sheet to prevent damage during transportation and installation.

Offer guidance on surface preparation, including substrate suitability, cleanliness, and smoothness requirements. The substrate should be free from dust, grease, and other contaminants to ensure



proper adhesion.

Explain the recommended adhesive or bonding agent and application techniques, ensuring secure adhesion to the substrate. Detail any open time or working time for the adhesive and the curing time before grouting.

Advise on cutting and shaping the sheet to fit specific areas, including the use of standard cutting tools or specialized equipment like waterjet cutters.

Discuss the use of edge profiles, corner pieces, and accessories to achieve a seamless and professional installation.

Highlight any limitations or precautions during installation, such as avoiding direct contact with flames or extreme heat sources.

Address specific considerations for vertical and horizontal installations, including load-bearing requirements.

6. Maintenance and Care:

Offer guidelines for routine cleaning and maintenance to preserve the sheet's appearance and prolong its lifespan. Emphasize the use of pH-neutral cleaners to prevent damage to the stone surface.

Recommend suitable cleaning agents and techniques that do not damage the stone veneer or compromise its bonding with the substrate.

Provide information on sealing and resealing (if applicable) to enhance durability and protect against staining, especially for porous stone types.

Advise on proper care for outdoor installations, such as removing debris, preventing moss or algae growth, and protecting against harsh weather conditions.

7. Fire and Safety Ratings:

Specify any fire ratings or certifications achieved by the product, such as Class A fire rating or ASTM E84 testing results. This information is crucial, especially for interior applications and building code compliance.

Address safety considerations during handling, installation, and use, including recommended personal protective equipment (PPE) when cutting or handling the sheet.

8. Environmental Considerations:

Mention any eco-friendly aspects of the product, such as recyclability, low volatile organic compound (VOC) emissions, or sustainable sourcing practices. This information is essential for environmentally conscious projects.

9. Testing and Certifications:

List relevant industry standards and certifications the product complies with, such as ASTM, ISO, or EN standards. These certifications ensure the product meets specific quality and performance criteria.

10. Storage and Shelf Life:

- Advise on proper storage conditions to maintain the product's quality and shelf life. Store the sheets in a cool, dry place, away from direct sunlight and extreme temperature fluctuations.

- Specify the recommended storage temperature and humidity levels to prevent damage and ensure the product remains in optimal condition.

11. Packaging and Delivery:



- Describe the packaging method to ensure safe transportation and delivery, protecting the sheets from potential damage during transit. Adequate packaging reduces the risk of product defects and ensures a successful installation.

13. Handling and Transportation:

- Provide guidelines for safe handling and transportation of the SUPERFLEX stone veneer sheets, considering their delicate nature and susceptibility to damage if mishandled.

14. Product Variations and Customization:

- Describe any available variations, such as different colors, patterns, and finishes, to meet specific design requirements.
- Discuss the possibility of customizing the flexible stone veneer sheets, including tailor-made sizes or unique finishes to match individual project needs.

15. Applications and Project References:

- Showcase examples of successful applications and project references where the SUPERFLEX stone veneer sheets have been used, highlighting their aesthetic appeal and performance in various settings.

Please remember that the actual technical data sheet will provide detailed and specific information about the particular product. Always refer to the manufacturer's official documentation for accurate and up-to-date information.

Stone Veneer Sheet composition:

- 100% stone thin sheet
- adhesive
- fiberglass
- surface mat / polyester resin

Flammability test on rigid and pliable solids: PASS *

Sample burning rate < 0,254 cm/s

*A sample is considered to have passed the test if the burning rate is not more than a 0.10 inch per Second.

All performed test complied with the applicable standards.

SGS Laboratory no	Extract, Volume (l)	Lead ppm (mg/L)	Cadmium ppm (mg/L)
14324	2.0	<1.0	<0.25
14324	2.0	<1.0	<0.25
14324	2.0	<1.0	<0.25
14324	2.0	<1.0	<0.25
14324	2.0	<1.0	<0.25
14324	2.0	<1.0	<0.25
Limit for FDA (any one of six)	1.0 ppm	0.25	0.25



Technical data SUPERFLEX Stone Veneer Sheet

S. no.	THICKNESS OF MATERIAL PARTICULARS	in mm
1	Thickness of natural stone layer (slate)	0,5 – 0,6
2	Thickness of other chemicals backing	1,00 – 1,40
3	Total thickness	1,50 – 2,00

S. no.	Test conducted on a laboratory ISO 9001:2000 approved internationally	Test value
4	Water absorption in % by weight	2,50
5	Water absorption in % (slate applied on marble substrate)	0,17
6	Abrasion test	0,70 – 0,80
7	Density	1,45