TECHNICAL DATA SHEET

APPLICATIONS

Classical stone veneer is a natural stone that can be glued to many different in door and outdoor surfaces. Their light weight and flexibility is appropriate for many applications such as wall panelling. Cladding on the buildings vertical and horizontal surfaces not previously considered for stone due to weight and / or flaking issues.

NormSlate Interior, Exterior, Door & Cabinets, Furniture, Kitchens, Bathrooms, Flooring, Signage, Wall cladding, Trim & Backsplashes etc.

TranSlate
Interior, Door & Cabinets, Furniture, Kitchens & any decoration purpose

where translucency is required.

ThinSlate
Special applications like stationery, bags, edges of doors & furniture's etc.

More suitable for indoor applications.

SandStone
Interior, Door & Cabinets, Furniture, Kitchens, Bathrooms etc.

TYPES OF CLASSICAL STONE VENEERS

Thickness	NormSlate	1.2 – 1.5 mm	
Weight		1.5 – 1.8	kgs/sqm
Flexibility		slightly flexible	
Constituents		Stone Layer + Polyester	Resin + Fiberglass
	TranSlate	1.2 – 1.5 mm	
		1.5 – 1.8	kgs/sqm
		slightly flexible	
		Stone Layer + UV Resin	+ Fiberglass
	ThinSlate	0.5 – 0.7 mm	
		0.8 – 1.0	
		very flexible	

Stone Layer + Water

kgs/sqm

based Glue (Ethylene

Vinyl acetate copolymer +

Cotton Fabric
SandStone
2.0 – 2.5 mm
3.0 – 3.5
slightly flexible
Silica Sand + Water

kgs/sqm

based Glue (Ethylene

Vinyl acetate copolymer)

+ Cotton Fabric

STANDARD SIZES OF CLASSICAL STONE VENEERS

NormSlate, TranSlate, ThinSlate: 122 x 61 cm, 4 x 2 feet, 0.74 sqm
SandStone: 110 x 68 cm, 3.6 x 2.2 feet, 0.74 sqm or 136 x 55 cm, 4.4 x 1.8 feet , 0.74 sqm

COLOR VARIATIONS

Classical Stone Veneer is a Natural Stone Veneer, color & texture variations are the property of the material. Texture variations with color difference are an inherent part of the natural beauty of quarried material. Stone Veneer can not be guaranteed to match with each Lot, it is recommended that material should be accepted in lots of 20, 40, 50 sheets to match. Large orders will be executed in bundles of 25 with 2-3 matching lots in each bundle. Exceptions of large lots are also a possibility.

USES FOR LAMINATION & DIRECT GLUING

Classical Stone Veneer is used for wall panel on MDF, HDF board’s application, furniture, woodworking machines, round column cladding and numerous interior and exterior applications. TransSlate, ThinSlate or SandStone Veneer is not recommended for flooring or countertop applications due to the thin soft nature of the Stone Veneer. NormSlate Veneer can directly be glued to concrete floors and walls with the help of epoxy and other PU glues.

SUBSTRATES

Stone Veneer can be applied to MDF, HDF boards, Styrofoam sheets, melamine, concrete, brick, concrete blocks & slabs, mortar plastered walls, drywall, plywood, acrylic and other plastic sheets.

LIGHT, HEAT & TEMPERATURE RESISTANCE

Stone Veneer has natural stone surface layer surface which acts as a UV light or UV rays protector and will resist high sun conditions for years. When it is glued to a substrate, Slate Stone veneer will handle high thermal contraction and or expansions of most standard construction materials. Stone Veneer will handle both high temperatures and freezing without cracking.

TranSlate Veneer may be used in illumination application such as lamp shades or backlight applications as translucent material or the other translucency applications.

TOOLS FOR CUTTING

Diamond blades used for marble & stone cutting can be used for cutting Stone Veneer. Metal cutting tools also can be used to cut the Stone Veneer. Any standard carbide or diamond saw blades would work just as well.

CURVATURE and BENDING

Stone Veneer can be bent with same flexibility as any plastic sheet product. The backing used gives it enough strength and flexibility. Stone Veneer can be bent in concave & convex forms, or arched or radial forms depending on the nature of curve. Stone Veneer can be bent or flexed to a radius of 380mm along the 1200mm length. The 600mm width will also have a slight flex to it, but is not recommended for bending. Due to the nature of the different thickness of the individual items, the degree of radius varies per item. We recommend testing the flax of the considered item prior to final installation.

INSTALLATION

Stone Veneer can be glued to surfaces using most standard laminate adhesives having a thick body or foaming quality. Prior to application of the glue clean, brush and de-grease the receiving surface or dust, oils or any other contaminants. In same installations, and depending upon the adhesive used, it may be necessary to prepare the back of the thin Stone veneer with solvent or recommended primer by the adhesive manufacture. We recommend making a test area with any adhesive prior to final application.

ADHESIVES

Knowledge of the special adhesives, and the respective surface for which they are recommended, is critical in obtaining superior installation when using Stone veneer. We recommend testing the selected adhesive prior to proceeding with installation. Humidity and temperature of the environment is to be evaluated first. If the application is outdoors, consideration to thermal expansion should be taken into account. Stone is a veneer, it must expand and contract which is recommended by the adhesive manufacturer, the bond must be tested by the installer prior to final installation.

Recommended types of adhesives & fillers:

Polyester-based gap filler putties

Silicone (with primer only)

Epoxies

Polyurethane wood glues

Thick latex-type adhesive, thin set etc. (uses only where air-drying can take place)

Construction grade multi-purpose adhesives (eg. Liquid Nails or PL Premium Polyurethane or similar)

Note: The back of Stone Veneer may require a filler-type adhesive in some cases. Polyurethane wood glues work well for most applications to fill gaps. For wet environment such as shower and bathroom applications, the use of epoxy is best.

Note: Pressure sensitive adhesives are also recommended due to the even backing of the Stone Veneer. Now Pressure sensitive glues are applied on the back of Stone Veneer and is supplied with the paper cover to use it as peel and stick material ready to use.

TILING

Stone Veneer can be used to create a tiled effect by leaving a grout joint between cut pieces of material. Test results have shown the use of water-based epoxy grouts work well to fill between the cut veneers. By removing the material just under the grout joint, a deeper grout can be achieved it desired. Epoxy grouts are available in many colors to match or coordinate with the different colors of Slate Stone. On final clean up of the epoxy with a sponge, the epoxy can also be used to seal and fill the Stone surface. It is recommended in this installation that the entire surface of the Slate Stone be sealed with epoxy as a final step to ensure complete satisfaction.

THE MANUFACTURER’S MATERIAL SAFETY DATA SHEET OF

NORMSLATE

MATERIAL SAFETY DATA SHEET OF NR GRADE STONE VENEER

ALONG WITH MAJOR CONSTITUENTS

MAJOR CONSTITUENTS OF NR GRADE STONE VENEER

1.SLATE

Properties of Slate:

It is a metamorphosed rock of shale’s showing luster. Compactness and tension. It can be scratched by a copper coin or a key. The streak is generally whitish grey. The main properties of a slate are as follows:

Strength

Transverse Strength- This property indicates the capacity of resistance to damage in handling to bear upon slates in their actual use. Rather than those of tension and compression. This is expressed as

$R = 1.5\ WL/bd2$

Where

R = modulus of rupture in kg/cm2.

W = breaking load in kg.

L = length of span between supporting steel bearing in cm.

b = width of specimen in cm. and

d = thickness of specimen in cm.

TABLE 2

Physlco - Mechanical Properties of Different Varieties of Slate Quarried in India, Bhutan,

the United Kingdom and the United States of America

PropertiesUnitIndianIndiaBhutanU.KU.S.A.Std.IS:DharmsalKhundKurnooBonsegSouthEasterPennsy6250-197alcomawalesn Newlvanta1YorkSpecific-2.7062.7822.7842.7652.7662.7832.764GravityTransversekg/cm2600489.85547861.7884.30861.87-844.65Strength

Shearkg/cm2-172.44231.63239.58216.10210.61-223.97StrengthWater%0.20.100.090.080.100.070.098-AbsorptionCorrodibility%-0.600.420.400.520.60-0.49
2. POLYESTER RESIN:

A) Physical & Chemical Properties

Form / Appearance
Material is a Polyester Resin

Color
Based on specification

Odor
None

Flammability
Not Determined

Melting Point
482-572 °F (250-300 °C)

Odor Threshold
Not Determined

Solubility (H2O)
Insoluble

VOC (Weight %)
Not applicable

Chemical Stability & Reactivity Information:

CHEMICAL STABILITY

Stable, however, may decompose if heated. Molten polymer or prolong air drying of polymer at temperatures above 195 °C will release small quantities of acetaldehyde

NIOSH – Pocket Guide – IDLHs (Immediately dangerous to Life or Health)

Acetaldehyde 75-07-0 2000 ppm IDLH

U.S. – OSHA-Final PELs-Time Weighted Averages (TWAs)

Acetaldehyde 75-07-0 200 ppm TWA; 360 mg/m3

TWA

U.S. – OSHA-Vacated PELs-TWAs

Acetaldehyde
75-07-0
100 ppm TWA; 180 mg/m3
TWA

ACGIH-Threshold Limits Values – Cellings (TLV-C)

Acetaldehyde
75-07-0
25 PPM Ceiling

C) Toxicological Information:

Due to this material’s high molecular weight, and results of toxicity studies of similar products, this material is considered to be of little to no toxicological concern.

Ecological Information: Ecotoxicity

This Product is not expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems. Based on similar substances, this material is expected to be essentially non-biodegradable.

Environmental effects

Based on the physical properties of this product, significant environmental persistence and bioaccumulation would not be expected.

Disposal Considerations: Disposal Instructions

Any unused product, in discarded, is not considered a RCRA hazardous waste. Dispose of as a non hazardous waste in accordance with local, state and federal regulations. The information offered here is for the product as shipped, Use of and / or alteration to the product, such as mixing with other materials, may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

3. FIBERGLASS:

A) COMPOSITION OF E-GLASS

SiO2
52
–62%
Alkaline oxides (Na2O2, K2O)
< 2%
Alkaline terrous oxides (CaO, MgO….)
16
– 30%
B2O3
0
–10%
Al2O3
11
– 16%
TiO2
0
– 3%
Fe2O3
0
– 1%
F2
0
– 2%

B) PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid

FORM Continuous or chopped strand mats glued or chopped strands or continuous wo ven fabric.

COLOUR: White or yellowish white.

ODOUR None, except for some products from which a slight odor is sometime releas ed when a pallet or carton is opened. This odor never indicates that an eventual Toxic product has been released in a dangerous amount. PH not applicable.

SPECIFIC TEMPERATURE AT WHICH CHANGES IN PHYSICAL STATE OCCUR

Softening point: Littleton point (defined as the temperature for which the visco sity of the

glass is 10 Poises) : approximately 850°C.

Melting point: Not applicable. Glass does not melt, but viscosity decreases by e levation of the temperature for E glass is in a range of temperature between 115 0°C and 1250°C (Fiberizing temperature).

DECOMPOSITION TEMPERATURE: Sizes and mat binder start to decompose at 200°C.

EXPLOSIVE PROPERTIES: None

DENSITY (Molten glass): 2.6 g/cu. Cm.

SOLUBILITY: Very low solubility in water. Sizes and binders can be partially (an d even totally) dissolved in most organic solvents.

NR GRADE STONE VENEER MAJOR INGREDIENTS

S. No	MATERIAL	INGREDIENTS	CONCENTRATION
1.	Polyester Resin	Polyethylene Terephthalate	99-99.9%
		Titanium Dioxide	<1%

2.
Fiberglass (Non-Respirable)

%weight 90%Min

Size & Binder

<10% Min

3.
Pigments & Colors & Stone
Minimal
Very Small

S. No.	MATERIAL COMPOSITION OF NR GRADE STONE	QUANTITY Kg./Sq. Mtr.
	VENEER	
1.	Processing Material	1.300
2.	Backing material	0.150
3.	Natural Stone	0.100
	TOTAL WEIGHT PER SQ. MTR.	1.500-1.750

THICKNESS OF LAYERS OF NR GRADE STONE

VENEER

PARTICULARS

IN MM

4.
Thickness of Natural Stone Layer

0.40mm

5.
Thickness of other Chemicals with backing

0.80mm

6
Total thickness of slate NR GRADE STONE VENEER
1.20mm-1.50mm

sheet

PHYSICAL PROPERTIES OF NR
TEST VALUE

GRADE STONE VENEER

	PROTOCOL		
	Slate		
	Mica		
7.	Water absorption, % by wt. (Test carried out on thin slate specimen)	2.50	ASTM C-121
		1.9	guidelines
8.	Water Absorption, % wt. (Test carried out on thin slate specimen pasted on marble piece)	0.17	ASTM C-97
		0.12	guidelines
9.	Abrasion Test	0.7	IS: 9162-1979
	---Average wear, mm	0.9	
	---Max. wear on individual specimen,	0.8	

1.0
guidelines

mm

10.
2
1.45
1.66
IS: 12866-1989
Density (Mass per unit area, Kg / M

guidelines

SECTION I – HAZARDOUS CONSTITUENTS OF NR GRADE STONE VENEER

COMPONENT	CAS NUMBER	PERCENT	PERMISSIBLE EXPOSURE LIMIT (TWA)	SHORT TERM EXPOSURE LIMIT (STEL
Vinyl acetate homopolymer	9003-20-7	51±2%	NH/NA	NH/NA
Residual monomer	108-05-4	<0.3 % max	10 ppm	20ppm\

SECTION II – IDENTIFICATION OF HAZARDS OF NR GRADE STONE VENEER

Toxic Effects of exposure / contact:
SKIN CONTACT:May irritate skin on prolonged or repeated contact.
EYE CONTACT:May cause slight irritation to eyes.
INHALATION:Not Possible being dry product.
INGESTION:Not permissible
DELAYED EFFECTS:Not reported.

SECTION III – FIRST AID MEASURES OF NR GRADE STONE VENEER USE

SKIN CONTACT:Wash skin with water after handling sheets.
EYE CONTACT:Material being dry does not affect eyes.
INHALATION:Inert smell.
INGESTION:

NOTE TO PHYSICIAN:There is no specific antidote. Treatment should be given symp tomatically on the clinical condition.

SECTION IV FIRE AND EXPLOSION HAZARD OF NR GRADE STONE VENEER

FIRE EXTINGUISHING MEDIA:Material will burn. Use water, foam dry chemical powde r, CO2 to extinguish the fire.
Thermal decomposition product:May yield acrid smoke and irritating gases with o xides of carbon and inorganic fragments. Toxic fumes & dark smoke yields when bu rnt.

SPECIAL FIRE FIGHTING PROCEDURE:Wear self contained breathing apparatus or equi
valent (MSHA/ NIOSH- approved).
UNUSUAL FIRE EXPLOSION HAZARDS:Sheet burns fast with flames. There is no explos
ion while burning.

SECTION V – ACCIDENTAL RELEASE MEASURES OF NR GRADE STONE VENEER Personal Precau
tions: Use personal protective equipment & handling when material needs to be b
urnt.

ENVIRONMENT PRECAUTIONS:Review fire and safety precautions before proceeding wi
th clean up. Use appropriate personal pro-active equipment during clean up. Keep
 spectators away. Dike and contain spill with an insert (e.g. sand, earth, etc)
absorbent collect the absorbed material in plastic bag for final disposal.

CLEANING METHODS:Wash floor with water, contaminated diking material may be inc
inerated or landfilled according to current local or central regulation.

SECTION VI – HANDLING AND STORAGE OF NR GRADE STONE VENEER

HANDLING PROCEDURE:Use appropriate personal protective Hand Gloves during handl
ing.
Protect against physical damage. Observe good hygiene practices.

STORAGE REQUIREMENT:Store at ambient temperature. Keep away from freezing. Keep
 sheets in stored at room temperature away from flames & fire.

SECTION VII – EXPOSURE CONTROL / PERSONAL PROTECTIVE EQUIPMENTS DURING NR GRADE
STONE VENEER HANDLING & USE

PERSONAL PROTECTIVE EQUIPMENT:Do not eat drink and smoke when working with NR G
RADE STONE VENEER sheets. Wash hands before breaks and after work. EYE PROTECT:
Impervious (rubber, neoprene, pvc, etc.) hand gloves, aprons.

RESPIRATION PROTECTION: None required if good ventilation in the area is mainta
ined. Otherwise suggest to wear MSHA/NIOH approved respirator where vapour conce
ntrations is more.
OTHERS:Eyewash facility and emergence shower.
ENGINEERING CONTROLS:not specific

SECTION VIII – PHYSICAL AND CHEMICAL PROPERTIES OF NR GRADE STONE VENEER Burning
 Temperature (°C):About 250-300°C
FLAMMABILITY: Combustible.
EXPLOSIVE LIMITS (% by vol.) LEL: NA UEL: NA FLASH POINT:NA

SECTION IX – STABILITY AND REACTIVITY DATA OF NR GRADE STONE VENEER

CHEMICAL STABILITY:Stable under normal ambient conditions.
INCOMPATIBILITY:Mineral acids and strong salt solution.
HAZARDOUS POLYMERISATION:Will occur.
CONDITION TO AVOID:Not specific.

SECTION X – TOXICOLOGICAL INFORMATION ON NR GRADE STONE VENEER Material has poly mer content the product is not a problem in normal handling and storage. However polymer when heated may be release acetaldehyde into workroom atmosphere when s heets are heat above 195 degree centigrade.

SECTION XI – ECOLOGICAL INFORMATION ON NR GRADE STONE VENEER Not determined, how ever as a general practice, do not allow product to overheat flame exposure or e xtreme cold close to sub zero.

SECTION XII – DISPOSAL INFORMATION ON NR GRADE STONE VENEER The damaged / discar ded material may be disposed of in accordance with current local or central regu lation.

SECTION XIII – TRANSPORTATION INFORMATION ON NR GRADE STONE VENEER

DO INFORMATION:Not applicable TDG INFORMATION:Not determined The material is not considered as dangerous for transportation.

SECTION XIV – MISCELLANEOUS INFORMATION

DISCLAIMER: The data presented here is based on information we believe to be re liable but unknown risk may be present. We disclaim liability for damage or inju ry which result for the use of the above data and nothing contained therein shal l constitute guarantee or a warranty (including warranty of merchantability or f itness for a particular purpose) or representation (including freedom from paten tability) by us with respect to the accuracy or completeness of the data the pro duct described or their use for any specific purpose as known to us. The final d etermination of the suitability of information, the manner of use of information or product and potential infringement of patents is the sole responsibility of the user.

THE MANUFACTURER’S MATERIAL SAFETY DATA SHEET OF

TRANSLATE

MATERIAL SAFETY DATA SHEET OF UV TRANSLUCENT STONE

VENEER ALONG WITH MAJOR CONSTITUENTS

MAJOR CONSTITUENTS OF UV TRANSLUCENT STONE VENEER

1.SLATE

Properties of Slate:

It is a metamorphosed rock of shale’s showing luster. Compactness and tension. I t can be scratched by a copper coin or a key. The streak is generally whitish gr ey. The main properties of a slate are as follows:

Strength

Transverse Strength- This property indicates the capacity of resistance to damag e in handling to bear upon slates in their actual use. Rather than those of tens ion and compression. This is expressed as

R = 1.5 WL/bd2

Where

R = modulus of rupture in kg/cm2.

W = breaking load in kg.

L = length of span between supporting steel bearing in cm.

b = width of specimen in cm. and

d = thickness of specimen in cm.

TABLE 2

Physlco - Mechanical Properties of Different Varieties of Slate Quarried in India, Bhutan,

the United Kingdom and the United States of America

PropertiesUnitIndianIndiaBhutanU.KU.S.A.Std.IS:DharmsalKhundKurnooBonsegSouthEasterPennsy6250-197alcomawalesn Newlvanta1YorkSpecific-2.7062.7822.7842.7652.7662.7832.764GravityTransversekg/cm2600489.85547861.7884.30861.87-844.65Strength

Shearkg/cm2-172.44231.63239.58216.10210.61-223.97StrengthWater%0.20.100.090.080.100.070.098-AbsorptionCorrodibility%-0.600.420.400.520.60-0.49

2. ULTRA VIOLET POLYESTER RESIN:

It is an unsaturated polyester resin, containing styrene monomer and methyl meth acrylate, and have high level of translucency.

A) Physical & Chemical Properties

a. Liquid Resin Properties

Appearance

Acid Value [mg KOH/gm]

: Clear Liquid

: 24±2

Viscosity at 25°C, cps

:

250±50

[Brookfield RVT sp2/10 rpm]

Specific Gravity at 25°C

Monomer Content, %

: 1.10±0.01

: 38±2

b. Curing Characteristics

Get time at 30°C, min.

RPL 111

Accelerator

Catalyst

Resin Temperature

: 15±2

: 100 gms

: 2.0 ml

: 2.0 ml

: 30°C

B) Toxicological Information:

Due to this material’s high molecular weight, and results of toxicity studies of similar products, this material is considered to be of little to no toxicological concern.

Ecological Information: Ecotoxicity

This Product is not expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems. Based on similar substances, this material is expected to be essentially non-biodegradable.

Environmental effects

Based on the physical properties of this product, significant environmental persistence and bioaccumulation would not be expected.

Disposal Considerations: Disposal Instructions

Any unused product, in discarded, is not considered a RCRA hazardous waste. Dispose of as a non hazardous waste in accordance with local, state and federal regulations. The information offered here is for the product as shipped, Use of and / or alteration to the product, such as mixing with other materials, may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

UV TRANSLUCENT STONE VENEER MAJOR INGREDIENTS

S. No	MATERIAL	INGREDIENTS	CONCENTRATION
1.	Polyester Resin	Polyethylene Terephthalate	99-99.9%
		Titanium Dioxide	<1%
2.	Fiber Glass		%weight 90%Min (Non-Respirable)
	Size & Binder		<10% Min

3.
Pigments & Colors & Stone
Minimal
Very Small

3. FIBERGLASS:

A) COMPOSITION OF E-GLASS

SiO2
52
–62%
Alkaline oxides (Na2O2, K2O)
< 2%
Alkaline terrous oxides (CaO, MgO….)
16
– 30%
B2O3
0
–10%
Al2O3
11
– 16%
TiO2
0
– 3%

Fe2O3
0 – 1%
F2
0 – 2%

B) PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid

FORM Continuous or chopped strand mats glued or chopped strands or continuous wo ven fabric.

COLOUR: White or yellowish white.

ODOUR None, except for some products from which a slight odor is sometime releas ed when a pallet or carton is opened. This odor never indicates that an eventual Toxic product has been released in a dangerous amount. PH not applicable.

SPECIFIC TEMPERATURE AT WHICH CHANGES IN PHYSICAL STATE OCCUR

Softening point: Littleton point (defined as the temperature for which the visco sity of the

glass is 10 Poises) : approximately 850°C.

Melting point: Not applicable. Glass dose not melt, but viscosity decreases by e levation of the temperature for E glass is in a range of temperature between 115 0°C and 1250°C (Fibeizing temperature).

DECOMPOSITION TEMPERATURE: Sizes and mat binder start to decompose at 200°C.

EXPLOSIVE PROPERTIES: None

DENSITY (Molten glass): 2.6 g/cu. Cm.

SOLUBILITY: Very low solubility in water. Sizes and binders can be partially (an d even totally) dissolved in most organic solvents.

UV TRANSLUCENT STONE VENEER MAJOR INGREDIENTS

S. No
MATERIAL
INGREDIENTS
CONCENTRATION

1.
Polyester Resin
Polyethylene
99-99.9%

Terephthalate

Titanium Dioxide

<1%

2.Fiber Glass%weight 90%Min(Non-Respirable)Size & Binder<10% Min3.

Pigments & Colors & Stone
Minimal

Very Small

S. No.
MATERIAL COMPOSITION OF UV TRANSLUCENT

QUANTITY Kg./Sq.

STONE VENEER

Mtr.

1.
Processing Material

1.300

2.
Backing material

0.150

3.
Natural Stone

0.100

TOTAL WEIGHT PER SQ. MTR.

1.500-1.750

THICKNESS OF LAYERS OF UV TRANSLUCENT

STONE VENEER

PARTICULARS

IN MM

4.
Thickness of Natural Stone Layer

0.40mm

5.
Thickness of other Chemicals with backing

0.80mm

6
Total thickness of slate UV TRANSLUCENT STONE

1.20mm-1.50mm

VENEER sheet

PHYSICAL PROPERTIES OF UV
TEST VALUE

TRANSLUCENT STONE VENEER

PROTOCOL				
Slate				
Mica				
7.				
Water absorption, % by wt. (Test				
2.50				
1.9				
ASTM C-121				
carried out on thin slate specimen)				
guidelines				
8.				
Water Absorption, % wt. (Test carried				
0.17				
0.12				
ASTM C-97				
out on thin slate specimen pasted on				
guidelines				
marble piece)				

9.
Abrasion Test
0.7
0.9

---Average wear, mm

IS: 9162-1979

---Max. wear on individual specimen,
0.8
1.0
guidelines

mm

10.
2
1.45
1.66
IS: 12866-1989
Density (Mass per unit area, Kg / M

guidelines

SECTION I – HAZARDOUS CONSTITUENTS OF UV TRANSLUCENT STONE VENEER

COMPONENT
CAS NUMBER
PERCENT
PERMISSIBLE
SHORT TERM

EXPOSURE LIMIT
EXPOSURE LIMIT

(TWA)
(STEL

Vinyl acetate
9003-20-7
51±2%
NH/NA
NH/NA
homopolymer

Residual
108-05-4
<0.3 % max
10 ppm
20ppm\
monomer

SECTION II – IDENTIFICATION OF HAZARDS OF UV TRANSLUCENT STONE VENEER

Toxic Effects of exposure / contact:
SKIN CONTACT:May irritate skin on prolonged or repeated contact.
EYE CONTACT:May cause slight irritation to eyes.
INHALATION:Not Possible being dry product.
INGESTION:Not permissible
DELAYED EFFECTS:Not reported.

SECTION III – FIRST AID MEASURES OF UV TRANSLUCENT STONE VENEER USE

SKIN CONTACT:Wash skin with water after handling sheets.
EYE CONTACT:Material being dry does not affect eyes.
INHALATION:Inert smell.
INGESTION:

NOTE TO PHYSICIAN:There is no specific antidote. Treatment should be given symp tomatically on the clinical condition.

SECTION IV FIRE AND EXPLOSION HAZARD OF UV TRANSLUCENT STONE VENEER

FIRE EXTINGUISHING MEDIA:Material will burn. Use water, foam dry chemical powde
r, CO2 to extinguish the fire.
Thermal decomposition product:May yield acrid smoke and irritating gases with o
xides of carbon and inorganic fragments. Toxic fumes & dark smoke yields when bu
rnt.
SPECIAL FIRE FIGHTING PROCEDURE:Wear self contained breathing apparatus or equi
valent (MSHA/ NIOSH- approved).
UNUSUAL FIRE EXPLOSION HAZARDS:Sheet burns fast with flames. There is no explos
ion while burning.

SECTION V – ACCIDENTAL RELEASE MEASURES OF UV TRANSLUCENT STONE VENEER

Personal Precautions: Use personal protective equipment & handling when materia
l needs to be burnt.

ENVIRONMENT PRECAUTIONS:Review fire and safety precautions before proceeding wi
th clean up. Use appropriate personal pro-active equipment during clean up. Keep
 spectators away. Dike and contain spill with an insert (e.g. sand, earth, etc)
absorbent collect the absorbed material in plastic bag for final disposal.

CLEANING METHODS:Wash floor with water, contaminated diking material may be inc
inerated or landfilled according to current local or central regulation.

SECTION VI – HANDLING AND STORAGE OF UV TRANSLUCENT STONE VENEER

HANDLING PROCEDURE:Use appropriate personal protective Hand Gloves during handl
ing.
Protect against physical damage. Observe good hygiene practices.

STORAGE REQUIREMENT:Store at ambient temperature. Keep away from freezing. Keep
 sheets in stored at room temperature away from flames & fire.

SECTION VII – EXPOSURE CONTROL / PERSONAL PROTECTIVE EQUIPMENTS DURING UV TRANSL
UCENT STONE VENEER HANDLING & USE

PERSONAL PROTECTIVE EQUIPMENT:Do not eat drink and smoke when working with UV T
RANSLUCENT STONE VENEER sheets. Wash hands before breaks and after work. EYE PRO
TECT:Impervious (rubber, neoprene, pvc, etc.) hand gloves, aprons.

RESPIRATION PROTECTION: None required if good ventilation in the area is mainta
ined. Otherwise suggest to wear MSHA/NIOH approved respirator where vapour conce
ntrations is more.
OTHERS:Eyewash facility and emergence shower.
ENGINEERING CONTROLS:not specific

SECTION VIII – PHYSICAL AND CHEMICAL PROPERTIES OF UV TRANSLUCENT STONE VENEER

Burning Temperature (°C):About 250-300°C
FLAMMABILITY: Combustible.
EXPLOSIVE LIMITS (% by vol.) LEL: NA UEL: NA FLASH POINT:NA

SECTION IX – STABILITY AND REACTIVITY DATA OF UV TRANSLUCENT STONE VENEER

CHEMICAL STABILITY:Stable under normal ambient conditions.
INCOMPATIBILITY:Mineral acids and strong salt solution.
HAZARDOUS POLYMERISATION:Will occur.
CONDITION TO AVOID:Not specific.

SECTION X – TOXICOLOGICAL INFORMATION ON UV TRANSLUCENT STONE VENEER Material ha s polymer content the product is not a problem in normal handling and storage. H owever polymer when heated may be release acetaldehyde into workroom atmosphere when sheets are heat above 195 degree centigrade.

SECTION XI – ECOLOGICAL INFORMATION ON UV TRANSLUCENT STONE VENEER Not determine d, however as a general practice, do not allow product to overheat flame exposur e or extreme cold close to sub zero.

SECTION XII – DISPOSAL INFORMATION ON UV TRANSLUCENT STONE VENEER The damaged / discarded material may be disposed of in accordance with current local or centra l regulation.

SECTION XIII – TRANSPORTATION INFORMATION ON UV TRANSLUCENT STONE VENEER

DO INFORMATION:Not applicable TDG INFORMATION:Not determined The material is not considered as dangerous for transportation.

SECTION XIV – MISCELLANEOUS INFORMATION

DISCLAIMER: The data presented here is based on information we believe to be re liable but unknown risk may be present. We disclaim liability for damage or inju ry which result for the use of the above data and nothing contained therein shal l constitute guarantee or a warranty (including warranty of merchantability or f itness for a particular purpose) or representation (including freedom from paten tability) by us with respect to the accuracy or completeness of the data the pro duct described or their use for any specific purpose as known to us. The final d etermination of the suitability of information, the manner of use of information or product and potential infringement of patents is the sole responsibility of the user.

THE MANUFACTURER’S MATERIAL SAFETY DATA SHEET OF

THINSLATE

MATERIAL SAFETY DATA SHEET OF FABRIC BACKING STONE

VENEER ALONG WITH MAJOR CONSTITUENTS

MAJOR CONSTITUENTS OF FABRIC BACKING STONE VENEER

1.SLATE

Properties of Slate:

It is a metamorphosed rock of shale’s showing luster. Compactness and tension. It can be scratched by a copper coin or a key. The streak is generally whitish grey. The main properties of a slate are as follows:

Strength

Transverse Strength- This property indicates the capacity of resistance to damage in handling to bear upon slates in their actual use. Rather than those of tension and compression. This is expressed as

$R = 1.5 WL/bd2$

Where

R = modulus of rupture in kg/cm2.

W = breaking load in kg.

L = length of span between supporting steel bearing in cm.

b = width of specimen in cm. and

d = thickness of specimen in cm.

TABLE 2

Physlco - Mechanical Properties of Different Varieties of Slate Quarried in India, Bhutan,

the United Kingdom and the United States of America

PropertiesUnitIndianIndiaBhutanU.KU.S.A.Std.IS:DharmsalKhundKurnooBonsegSouthEasterPennsy6250-197alcomawalesn Newlvanta

1YorkSpecific-2.7062.7822.7842.7652.7662.7832.764GravityTransversekg/cm2600489.8
5547861.7884.30861.87-844.65StrengthShearkg/cm2-172.44231.63239.58216.10210.61-2
23.97StrengthWater%0.20.100.090.080.100.070.098-AbsorptionCorrodibility%-0.600.4
20.400.520.60-0.49
2. COTTON FABRIC:

PROPERTIES OF COTTON FIBER (COTTON FABRIC IS MADE FROM COTTON FIBER)

Property
Evaluation

Shape
Fairly uniform in width, 12–20 micrometers; length

varies from 1 cm to 6 cm (½ to 2½ inches); typical

length is 2.2 cm to 3.3 cm (⅞ to 1¼ inches).

Luster
high

Tenacity (strength)

Dry
3.0–5.0 g/d
Wet
3.3–6.0 g/d

Resiliency
low

Density
1.54–1.56 g/cm³

Moisture absorption

raw: conditioned
8.5%
saturation
15–25%
mercerized: conditioned
8.5–10.3%
saturation
15–27%+

Dimensional stability
good

Resistance to

acids
damage, weaken fibers
alkali
resistant; no harmful effects
organic solvents
high resistance to most
sunlight
Prolonged exposure weakens fibers.
microorganisms
Mildew and rot-producing bacteria damage fibers.
insects
Silverfish damage fibers.

Thermal reactions

to heat
Decomposes after prolonged exposure to temperatures

of 150°C or over.
to flame
Burns readily.

Cotton fibers viewed under a scanning electron microscope The chemical compositi on of cotton is as follows:

FABRIC 91.00%

Water 7.85%

Protoplasm, pectins 0.55%

Waxes, fatty substances 0.40%

Mineral salts 0.20%

PVA GLUE:

Technical Specification

It is PVA based revolutionary water resistant wood adhesive with excellent bondi ng strength made as per European EN 204/205 D3 standards.

S. No.
Test
Unit
Test Method
Results

1
COLOUR
-
VISUAL
MILKY WHITE

2
APPEARANCE
-
VISUAL
VISCOUS PASTE

3
BROOKFIELD
cps
BROOKFIELD,

VISCOSITY @ 30C

RVDVI+
9000 ± 3000

(SPINDLE NO.6/20RPM)

4
SOLID CONTENT @ 105
%
Oven
52 ± 1

C till constant Weight

5
pH VALUE

BY DIGITAL PH
4 + 0.3

METER

The above information is based on the present state of our knowledge and experience. The statements mentioned herein should be considered as information without obligation. For applications, users should make their own assessment of our product under their own conditions according to final requirements. If local regulations exist, they should be applied

Rev.3/ April 2013

S. No.
MATERIAL COMPOSITION OF STONE VENEER

	QUANTITY Kg./Sq. Mtr.
1. Processing Material	0.550
2. Backing material	0.150
3. Natural Stone	0.100
TOTAL WEIGHT PER SQ. MTR.	0.800 - 1.000

THICKNESS OF LAYERS OF STONE VENEER

PARTICULARS

IN MM

4.
Thickness of Natural Stone Layer

0.20mm

5.
Thickness of other Chemicals with backing

0.30mm

6
Total thickness of slate stone veneer sheet

0.50mm-0.70mm

PHYSICAL PROPERTIES OF
TEST VALUE

STONE VENEER

PROTOCOL

Slate

Mica

7.
Water absorption, % by wt. (Test
2.50

1.9
ASTM C-121

carried out on thin slate specimen)

guidelines

8.
Water Absorption, % wt. (Test carried
0.17

0.12
ASTM C-97

out on thin slate specimen pasted on

guidelines

marble piece)

9.
Abrasion Test
0.7
0.9

---Average wear, mm

IS: 9162-1979

---Max. wear on individual specimen,
0.8
1.0
guidelines

mm

10.
2
1.45
1.66
IS: 12866-1989
Density (Mass per unit area, Kg / M)

guidelines

SECTION I – HAZARDOUS CONSTITUENTS OF FABRIC BACKING STONE VENEER

Not a hazardous substance or preparation within the meaning of the current Hazardous Materials Regulations (GefStoffV).

SECTION II – IDENTIFICATION OF HAZARDS OF FABRIC BACKING STONE VENEER

Toxic Effects of exposure / contact:
SKIN CONTACT:Does not irritate skin on prolonged or repeated contact.
EYE CONTACT:Does not cause slight irritation to eyes.
INHALATION:Not Possible being dry product.
INGESTION:Not permissible
DELAYED EFFECTS:Not reported.

SECTION III – FIRST AID MEASURES OF FABRIC BACKING STONE VENEER USE

SKIN CONTACT:Wash skin with water after handling sheets.
EYE CONTACT:Material being dry does not affect eyes.
INHALATION:Inert smell.
INGESTION:

NOTE TO PHYSICIAN:There is no specific antidote. Treatment should be given symptomatically on the clinical condition.

SECTION IV FIRE AND EXPLOSION HAZARD OF FABRIC BACKING STONE VENEER

FIRE EXTINGUISHING MEDIA:Material will burn through direct or indirect heat
Thermal decomposition product:Does yield smoke and irritating gases with oxides of carbon and inorganic fragments. Non Toxic fumes does not come but & dark smoke do when burnt. SPECIAL FIRE FIGHTING PROCEDURE:Wear self contained breathing apparatus or equivalent (MSHA/ NIOSH- approved).

UNUSUAL FIRE EXPLOSION HAZARDS:Sheet does not burns fast with flames. There is no explosion while burning.

SECTION V – ACCIDENTAL RELEASE MEASURES OF FABRIC BACKING STONE VENEER

Personal Precautions: Use personal protective equipment & handling when materia l needs to be burnt.

ENVIRONMENT PRECAUTIONS:Review fire and safety precautions before proceeding wi th clean up. Use appropriate personal pro-active equipment during clean up. Keep spectators away. Dike and contain spill with an insert (e.g. sand, earth, etc) absorbent collect the absorbed material in plastic bag for final disposal.

CLEANING METHODS:Wash floor with water, contaminated diking material may be inc inerated or landfilled according to current local or central regulation.

SECTION VI – HANDLING AND STORAGE OF FABRIC BACKING STONE VENEER

HANDLING PROCEDURE:Use appropriate personal protective Hand Gloves during handl ing.
Protect against physical damage. Observe good hygiene practices.

STORAGE REQUIREMENT:Store at ambient temperature. Keep away from freezing. Keep sheets in stored at room temperature away from flames & fire.

SECTION VII – EXPOSURE CONTROL / PERSONAL PROTECTIVE EQUIPMENTS DURING FABRIC BA CKING STONE VENEER HANDLING & USE

PERSONAL PROTECTIVE EQUIPMENT:Do not eat drink and smoke when working with FABR IC BACKING STONE VENEER sheets. Wash hands before breaks and after work. EYE PRO TECT:Impervious (rubber, neoprene, pvc, etc.) hand gloves, aprons. RESPIRATION PROTECTION: None required if good ventilation in the area is maintained. Otherw ise suggest to wear MSHA/NIOH approved respirator where vapour concentrations is more.
OTHERS:Eyewash facility and emergence shower.
ENGINEERING CONTROLS:not specific

SECTION VIII – PHYSICAL AND CHEMICAL PROPERTIES OF FABRIC BACKING STONE

VENEER
Burning Temperature (°C):About 250-300°C
FLAMMABILITY: Non-Combustible.
EXPLOSIVE LIMITS (% by vol.) LEL: NA UEL: NA FLASH POINT:NA

SECTION IX – STABILITY AND REACTIVITY DATA OF FABRIC BACKING STONE VENEER

CHEMICAL STABILITY:Stable under normal ambient conditions.
INCOMPATIBILITY:Mineral acids and strong salt solution.

HAZARDOUS POLYMERISATION:Will not occur.
CONDITION TO AVOID:Not specific.

SECTION X – TOXICOLOGICAL INFORMATION ON FABRIC BACKING STONE VENEER Material has polymer content the product is not a problem in normal handling and storage. However polymer when heated does not release acetaldehyde into workroom atmosphere when sheets are heat above 195 degree centigrade.

SECTION XI – ECOLOGICAL INFORMATION ON FABRIC BACKING STONE VENEER Not determined, however as a general practice, do not allow product to overheat flame exposure or extreme cold close to sub zero.

SECTION XII – DISPOSAL INFORMATION ON FABRIC BACKING STONE VENEER The damaged / discarded material may be disposed of in accordance with current local or central regulation.

SECTION XIII – TRANSPORTATION INFORMATION ON FABRIC BACKING STONE VENEER

DO INFORMATION:Not applicable TDG INFORMATION:Not determined The material is not considered as dangerous for transportation.

SECTION XIV – MISCELLANEOUS INFORMATION

DISCLAIMER: The data presented here is based on information we believe to be reliable but unknown risk may be present. We disclaim liability for damage or injury which result for the use of the above data and nothing contained therein shall constitute guarantee or a warranty (including warranty of merchantability or fitness for a particular purpose) or representation (including freedom from patentability) by us with respect to the accuracy or completeness of the data the product described or their use for any specific purpose as known to us. The final determination of the suitability of information, the manner of use of information or product and potential infringement of patents is the sole responsibility of the user.

THE MANUFACTURER’S MATERIAL SAFETY DATA SHEET OF

SANDSTONE

MATERIAL SAFETY DATA SHEET OF FABRIC BACKING STONE VENEER ALONG WITH MAJOR CONSTITUENTS

MAJOR CONSTITUENTS OF FLEXIBLE SANDSTONE VENEER

1.SAND

A) QUARTZ SAND

Quartz sand is a term normally applied to high purity silica sand products with closely controlled sizing. It is a more precise product than common concrete and asphalt gravels. Silica is the name given to a group of minerals composed solely of silicon and oxygen, the two most abundant elements in the earth's crust and this material is used to make the thin sandstone. In spite of its simple chemical formula, SiO_2, silica exists in many different shapes and crystalline structures. Found most commonly in the crystalline state, it also occurs in an amorphous form resulting from weathering or plankton fossilization. For industrial and manufacturing applications, deposits of silica yielding products of at least 95% SiO_2 are preferred. Silica is hard, chemically inert and has a high melting point, attributable to the strength of the bonds between the atoms.

SPECIFICATION OF QUARTZ SAND

SiO_2
98% min

Al_2O_3
1.5% max

Fe_2O_3
0.5% max

P_2O_5
0.1% max

B) NATURAL RIVER SAND

Natural River Sand is a naturally occurring granular material composed of finely divided rock and mineral particles. The composition of sand is highly variable, depending on the local rock

sources and conditions, but the most common constituent of sand in inland continental settings and non-tropical coastal settings is silica (SiO_2), usually in the form of quartz. River sand is therefore most likely to be of the same composition as the surrounding rocks - or in some cases the composition of the rocks upstream if they are much different from the rocks downstream. If a river has a substantial population of marine snails, oysters, clams, or other shelled water animals, fragmented shells which are primarily composed of calcium carbonate ($CaCO_3$) may form a significant portion of the sand.

PHYSICAL PROPERTIES

Appearance
Granular Sand ranging in colour from tan to orange brown.
Boiling Point (°C)
Not Applicable
Melting Point (°C)
Not Applicable
Vapour Pressure
Not Applicable
Specific Gravity
2.0 - 3.0
(H_2O=1)

Flashpoint
Not Applicable
Flammability Limits
Not Applicable
Solubility in Water
Insoluble
Auto-ignition
Does not auto-ignite
Temperature (°C)

Odour Threshold
Normally no odour
pH, at Standard
Between 4.5 - 7.0
Concentration

Molecular Weight
Not Determined

INGREDIENTS

Chemical Name	CAS Number	Proportion	Exposure Limits
Sand – Crystalline	14808-60-7	>95%	0.2 mg/m3 TWA
Silica (quartz)			
Mineral and Organic	Various	<5%	
Impurities			

2. COTTON FABRIC :

PROPERTIES OF COTTON FIBER (COTTON FABRIC IS MADE FROM COTTON FIBER)

Property	Evaluation
Shape	Fairly uniform in width, 12–20 micrometers; length varies from 1 cm to 6 cm (½ to 2½ inches); typical length is 2.2 cm to 3.3 cm (⅞ to 1¼ inches).
Luster	high
Tenacity (strength)	
Dry	3.0–5.0 g/d
Wet	3.3–6.0 g/d
Resiliency	low
Density	1.54–1.56 g/cm³
Moisture absorption	

raw: conditioned
8.5%
saturation
15–25%
mercerized: conditioned
8.5–10.3%
saturation
15–27%+

Dimensional stability
good

Resistance to

acids
damage, weaken fibers
alkali
resistant; no harmful effects
organic solvents
high resistance to most

sunlight
Prolonged exposure weakens fibers.
microorganisms
Mildew and rot-producing bacteria damage fibers.
insects
Silverfish damage fibers.

Thermal reactions

to heat
Decomposes after prolonged exposure to temperatures

of 150˚C or over.
to flame
Burns readily.

Cotton fibers viewed under a scanning electron microscope The chemical compositi on of cotton is as follows:

FABRIC 91.00%

Water 7.85%

Protoplasm, pectins 0.55%

Waxes, fatty substances 0.40%

Mineral salts 0.20%

CELANESE EMULSION:

Characteristics Stabilization

Celanese Emulsion is a non-plasticized aqueous copolymer dispersion based on vin yl acetate and ethylene.

Celanese Emulsion meets recommendation BfR XIV.

Surfactants and polyvinyl alcohol

Recommended Application Areas

Paper & Cloth and packaging adhesives

Adhesives for plastic foil laminations

Specification

These technical data are determined for each lot before its release by quality control laboratory.

	Unit	Lower Limit	Upper Limit
Solids content (DIN EN ISO 3251; 2 h; 105 °C)	%	54	56
Brookfield Viscosity (DIN EN ISO 2555; RVT; spindle no. 4; 20 rpm, 23 °C)	mPa·s	2000	3000
pH value			

(DIN ISO 976; 1:1

3.5
5.1
diluted by water)

Additional Data

These data are solely to describe the product. These are not subject to constant monitoring or part of the specification.

Unit
Typ. value

Dispersion

Particle size
µm
approx. 0.3 - 1.2
Minimum film forming temperature (MFFT)

(DIN ISO 2115)
°C
0

Film*

Appearance
slightly opaque, tack-free
Glass transition temperature Tg

(DIN 53 765; DSC; heating rate 20 K/min)
°C
approx. 5

dried under standard atmospheric conditions at 23 °C and 50 % relative humidity
(DIN EN 23 270)

Applications

Celanese Emulsion is a low-viscous and shear-stable VAE copolymer dispersion whi ch is especially suitable for the manufacture of adhesives on fast running appli cation systems. Adhesives based on Celanese Emulsion can be used for gluing pape r, cloth, cartons and plastic foils. The adhesion can be improved by adding soft er vinyl acetate/ethylene dispersions or plasticizers. Compatibility tests are n ecessary. Films of Celanese Emulsion display a relatively high cohesion. Therefo re adhesives based on Celanese Emulsion are suitable for bonds which are exposed to higher temperatures such as thin sandstone.

FLEXIBLE SANDSTONE VENEER MAJOR INGREDIENTS

S. No.
MATERIAL
INGREDIENTS
Concentration

SAND

1.
1.QUARTZ SAND
SiO2-95%
99.9%

2. NATURAL RIVER SAND
SiO2-98%
99.9%

2.
COTTON FABRIC

3.
PVA GLUE (CELANESE)

S. No.	MATERIAL COMPOSITION OF FLEXIBLE	QUANTITY Kg./Sq.
	SANDSTONE VENEER	Mtr.
1.	SAND	
	1. QUARTZ SAND	3.000
	2. NATURAL RIVER SAND	
2.	BACKING MATERIAL (COTTON FABRIC)	0.150
3.	PVA GLUE (CELANESE)	0.500
	TOTAL WEIGHT PER SQ. MTR.	

3.000-3.500

THICKNESS OF LAYERS OF FLEXIBLE SANDSTONE

VENEER

PARTICULARS

IN MM

4.
Thickness of Natural Sand Layer

1.40mm

5.
Thickness of other Chemicals with backing
0.60-0.80mm

6
Total thickness of Flexible Sandstone veneer sheet
2.00mm-2.50mm

PHYSICAL PROPERTIES OF
TEST VALUE
PROTOCOL

SANDSTONE VENEER

7.
Average Water absorption, % by wt
9.6 %
IS 1124:1974

8.
Density
1.74 g/cc
IS 1706:1972

9.
Abrasion Test Maximum wear on
The complete

individual specimen
sample weared
IS 1706:1972

out during test

SECTION I – HAZARDOUS CONSTITUENTS OF FLEXIBLE SANDSTONE VENEER

Not a hazardous substance or preparation within the meaning of the current Hazardous Materials Regulations (GefStoffV).

SECTION II – IDENTIFICATION OF HAZARDS OF FLEXIBLE SANDSTONE VENEER

No Toxic Effects of exposure / contact:
SKIN CONTACT:Does not irritate skin on prolonged or repeated contact.
EYE CONTACT:Does not cause slight irritation to eyes.
INHALATION:Not Possible being dry product.
INGESTION:Not permissible
DELAYED EFFECTS:Not reported.

SECTION III – FIRST AID MEASURES OF FLEXIBLE SANDSTONE VENEER USE

SKIN CONTACT:Wash skin with water after handling sheets.
EYE CONTACT:Material being dry does not affect eyes.
INHALATION:Inert smell.
INGESTION:

NOTE TO PHYSICIAN:There is no specific antidote. Treatment should be given symptomatically on the clinical condition.

SECTION IV FIRE AND EXPLOSION HAZARD OF FLEXIBLE SANDSTONE VENEER

FIRE EXTINGUISHING MEDIA:Material will burn through direct or indirect heat

Thermal decomposition product:Does not yield smoke and irritating gases with oxides of carbon and inorganic fragments. Non Toxic fumes & dark smoke does not come when burnt. SPECIAL FIRE FIGHTING PROCEDURE:Wear self contained breathing apparatus or equivalent (MSHA/ NIOSH- approved).

UNUSUAL FIRE EXPLOSION HAZARDS:Sheet does not burns fast with flames. There is no explosion while burning.

SECTION V – ACCIDENTAL RELEASE MEASURES OF FLEXIBLE SANDSTONE VENEER Personal Precautions: Use personal protective equipment & handling when material needs to be burnt.

ENVIRONMENT PRECAUTIONS:Review fire and safety precautions before proceeding with clean up. Use appropriate personal pro-active equipment during clean up. Keep spectators away. Dike and contain spill with an insert (e.g. sand, earth, etc) absorbent collect the absorbed material in plastic bag for final disposal.

CLEANING METHODS:Wash floor with water, contaminated diking material may be incinerated or landfilled according to current local or central regulation.

SECTION VI – HANDLING AND STORAGE OF FLEXIBLE SANDSTONE VENEER

HANDLING PROCEDURE:Use appropriate personal protective Hand Gloves during handling.
Protect against physical damage. Observe good hygiene practices.

STORAGE REQUIREMENT:Store at ambient temperature. Keep away from freezing. Keep sheets in stored at room temperature away from flames & fire.

SECTION VII – EXPOSURE CONTROL / PERSONAL PROTECTIVE EQUIPMENTS DURING FLEXIBLE SANDSTONE VENEER HANDLING & USE

PERSONAL PROTECTIVE EQUIPMENT:Do not eat drink and smoke when working with FABRIC BACKING STONE VENEER sheets. Wash hands before breaks and after work. EYE PROTECT:Impervious (rubber, neoprene, pvc, etc.) hand gloves, aprons. RESPIRATION PROTECTION: None required if good ventilation in the area is maintained. Otherwise suggest to wear MSHA/NIOH approved respirator where vapour concentrations is more.
OTHERS:Eyewash facility and emergence shower.
ENGINEERING CONTROLS:not specific

SECTION VIII – PHYSICAL AND CHEMICAL PROPERTIES OF FLEXIBLE SANDSTONE

VENEER
Burning Temperature (°C):About 250-300°C
FLAMMABILITY: Non-Combustible.
EXPLOSIVE LIMITS (% by vol.) LEL: NA UEL: NA FLASH POINT:NA

SECTION IX – STABILITY AND REACTIVITY DATA OF FLEXIBLE SANDSTONE VENEER

CHEMICAL STABILITY:Stable under normal ambient conditions.
INCOMPATIBILITY:Mineral acids and strong salt solution.

HAZARDOUS POLYMERISATION:Will not occur.
CONDITION TO AVOID:Not specific.

SECTION X – TOXICOLOGICAL INFORMATION ON FLEXIBLE SANDSTONE VENEER Material has polymer content the product is not a problem in normal handling and storage. How ever polymer when heated does not release acetaldehyde into workroom atmosphere when sheets are heat above 195 degree centigrade.

SECTION XI – ECOLOGICAL INFORMATION ON FLEXIBLE SANDSTONE VENEER Not determined, however as a general practice, do not allow product to overheat flame exposure or extreme cold close to sub zero.

SECTION XII – DISPOSAL INFORMATION ON FLEXIBLE SANDSTONE VENEER The damaged / di scarded material may be disposed of in accordance with current local or central regulation.

SECTION XIII – TRANSPORTATION INFORMATION ON FLEXIBLE SANDSTONE VENEER DO INFORM ATION:Not applicable TDG INFORMATION:Not determined The material is not consi dered as dangerous for transportation.

SECTION XIV – MISCELLANEOUS INFORMATION

DISCLAIMER: The data presented here is based on information we believe to be re liable but unknown risk may be present. We disclaim liability for damage or inju ry which result for the use of the above data and nothing contained therein shal l constitute guarantee or a warranty (including warranty of merchantability or f itness for a particular purpose) or representation (including freedom from paten tability) by us with respect to the accuracy or completeness of the data the pro duct described or their use for any specific purpose as known to us. The final d etermination of the suitability of information, the manner of use of information or product and potential infringement of patents is the sole responsibility of the user.