



SURFACING AGGREGATE

GENERAL INFORMATION

Approved quartz silica, ceramic granule or mineral surfacing may be applied to all Soprema cold liquid-applied membranes to achieve an aesthetic finish, bond/wearing layer and/or non-skid wearing surface. When specified, the approved aggregate is broadcast into an appropriate coat of Alsan/Alsan RS resin applied over clean semi-cured Alsan or Alsan RS membrane. All surfacing aggregates shall be washed, kiln-dried, dust-free, and suitable for broadcast, angular grain. Aggregate size as specified and/or approved by Soprema.

Below are commonly used aggregate sizes with Soprema Alsan and Alsan RS Systems:

- Grade 0: 0.4 – 0.8 mm
- Grade 1: 0.7 – 1.2 mm
- Grade 2: 1.0 – 1.6 mm

PRODUCT APPLICATION & COVERAGE

Broadcast acceptable aggregate into supplemental, application of wet resin applied over clean, semi-cured membrane. Obtain full and uniform coverage of aggregate broadcast into resin. After curing, remove any loose aggregate by blowing with oil-free compressed air or vacuum.

When using pure quartz silica aggregates, the average density is about 90 lbs. per cubic foot. This will vary depending upon the thickness of the finished surface. To estimate the weight of silica sand aggregate needed to cover a given area, the following formula is suggested:

Area (Sq. Ft.) x thickness (inches) x 7.5 = approximate weight of sand aggregate required in lbs.

COLORED QUARTZ SILICA APPLICATIONS:

When applying a colored quartz silica finish, Soprema recommends blending a minimum of two different colored aggregates and/or adding white and black color to the desired and approved color to create a variegated finish. The pre-mixed colored aggregate should be broadcast into Alsan (with single-component urethane systems) embedment coat and/or

into Alsan RS (with two-component methyl-methacrylate membrane system) embedment coat or other product as recommended by Soprema and once the resin cures and the aggregate excess is removed, seal-coated with approved Alsan or Alsan RS clear finish resin.



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COMMON SURFACING AGGREGATE GRADATIONS (WEIGHT % PASSING)											
ASTM E11 Sieve #	mm Open	In. Open	000	P40	00	00N	0	1	2	3	4
4	4.75	0.188								100	99
6	3.35	0.132							100	99	50
8	2.36	0.094						100	95	55	10
10	1.70	0.067		100			100	95	55	5	1
16	1.18	0.045		95		100	99	45	10	1	
20	0.85	0.033		80	100	99	45	5	1		
30	0.60	0.023	100	60	95	35	5	1			
40	0.42	0.016	95	35	40	5	1				
50	0.30	0.012	75	10	5	1					
60	0.25	0.010	45	5	2						
70	0.21	0.008	30	2	1						
100	0.15	0.006	5	1							

Note: Grade designations may vary by region. Compare suggest designation to sieve grading analysis of supplier. The following grade designations are recommended:

Grade 0: 0.4 – 0.8 mm

Grade 1: 0.7 – 1.2 mm

Grade 2: 1.0 – 1.6 mm

Specific gravity (ASTM C128): >2.50, Acid Solubility (AWWA B100): < 5%, Hardness (Mohs Scale): 6-8, Sphericity and Roundness (API RP56): 0.6, Sodium Soundness (ASTM C88): <15%, Test for Clay (ASTM C40 or C117): plate 1 and 2, Unit Weight and Voids (ASTM C29): 100 lb/cu ft, Chemical analysis: SiO₂: 98-99; Al₂O₃: 0.03-0.3, Fe₂O₃: 0.03-0.3, Na₂O, K₂O, TiO₂, MnO₂, MgO: to 0.05.

GENERAL

SOPREMA is a Certified ISO 9001:2000 worldwide producer of bituminous membranes and a manufacturer of liquid membrane systems with factories in Europe and North America. Waterproofing sheets have been produced by SOPREMA since 1908. SOPREMA has been at the forefront of liquid membrane technology for nearly two decades.