

## Aggregate Types &amp; Comparisons for Resin floor Toppings

Aggregates are essential components of many resin floor toppings. Inert Silicas provide, hardness, durability, resistance and non-slip properties. Providing a blend of grades for a topping is essential for performance and for trowellability..

Nuplex specify three types: fine, medium and coarse. These are defined from suppliers as below

	Fine sizes	Medium	Coarse	Non-slip & Speciality
Marble aggregates for Architectural Terrazzite only <b>Omya</b>	CPG 0.4 – 0.8mm	Nil	3-6mm marble aggregate; normally white with small amounts of black, dolomite	n/a
<b>Whiterock AUS</b>	7035 0.35 -0.7mm		ditto	
<b>Barossa</b>	-1+0.5mm	range	Ditto, plus Black Granite 3-6mm, and Sunset Gold (dolomite) & others	
<b>Silicas</b>				
<b>For Industrial flooring - below</b>				
<b>HSC Minerals Victoria – Silica</b>	Superfine Silica	18/40 or 16/30	8/16	30/60 is a K20s type
<b>Boral Australia</b>	* 900 is coarser than NZ J61 grade	1mm	2mm	Garnet 12/25
<b>Cook Industrial minerals- graded Silica</b>	Fine white silica sands; 0.3mm and finer	Graded silica -1 + 0.5	Graded Silica -3.2 + 1.6	Garnet 20/40, 30/40
<b>Industrial Minerals Sand Q-series.</b> Available in both NZ and Australia	*AB or TN  Q900-Pro white sand. is coarser than NZ J61 grade	Q1	Q2	Garnet A-grade 12/25 (coarse)
<b>Nuplex NZ; The Nuplex high level specification</b>	J61W silica 0.15 – 0.3mm	18/36 walton park rounded silica	7/14 walton park rounded silica	Silicon carbide, 16 & 24 grit. Garnet 12/25. Broadcast Fine: K20s silica. Broadcast rough : 18/36
<b>Nuplex NZ</b>	Nuplex make <u>STZ Flooring sand</u> , this is a blend of grades for ready to use contracting. It also includes a trace of yellow oxide for colour continuity. <u>STZ Coving sand</u> is a blend for cove installation.			Revtred glass beads Aluminum oxide. Silicon Carbide. K20s

**Note well:** Nuplex do not take responsibility for the quality of third party supplied aggregates. We make our best recommendation based on knowledge at the time. If in doubt contact the supplier. using Nuplex supplied STZ sands will ensure reliability.

Please note: Nuplex' recommendation is made based on experience and laboratory work but note that there are variations in the both the cut of mesh sizes and the appearance ( colour and dust content) between suppliers. Nuplex's recommendations should be used expecting some variations of the required blend ratio to achieve applicability. It is the contractors responsibility to do trial blends to ensure colour and "use-ability". Do samples for the clients to approve.

Mesh sizes: aggregates are often known by the mesh size through which they will pass. Often this is a range. Small mesh numbers are bigger mesh "squares". So 7/14 is larger than 18/36.

#### PTO mesh size explanation

Sieve size (mm)	Opening		Standard Mesh	
	(in)	(µm)	US	Tyler
5.6	0.22	5600	3.5	-
4.75	0.187	4750	4	-
4.00	.157	4000	5	-
3.35	.132	3350	6	-
2.80	.110	2800	7	-
2.36	.093	2360	8	-
2.00	.079	2000	10	-
1.7	.0661	1700	12	10
1.4	.0555	-	14	12
1.18	.0469	-	16	14
1.0	.0394	-	18	16
.850	.0331	850	20	20
.71	.0278	710	25	24
.600	.0232	600	30	28
.50	.0197	500	35	32
.47	-	-	-	-
.465	-	-	-	-
.437	-	-	-	-
.425	.0165	425	40	35
.389	-	-	-	-
.368	-	-	-	-
.355	.0139	355	45	42
.31	-	-	-	-
.30	.0117	300	50	48

