

# Properl Crete

Perlite Lightweight Concrete Insulation.

<b>Description</b>	Perlite concrete aggregates combined with Portland cement and water to produce a lightweight concrete insulation layer used for roof decks, floor fills, and lightweight structural decks. It complies with <b>ASTM C-332,group 1,BS EN12667</b>	
<b>Where to use</b>	<ul style="list-style-type: none"> <li>• Roof decks.</li> <li>• Floor fills.</li> <li>• Structural decks.</li> <li>• Insulation for steam and coolant pipes.</li> <li>• Oven Insulation.</li> <li>• Interstitial floors in hospitals.</li> <li>• Lightweight pre-cast forms and blocks.</li> </ul>	
<b>Advantages</b>	<ul style="list-style-type: none"> <li>• Extremely light weight.</li> <li>• Superior thermal and acoustic.</li> <li>• insulation.</li> <li>• Adaptable.</li> <li>• Fire retardant.</li> <li>• Reduce construction costs.</li> <li>• Eco-friendly.</li> </ul>	
<b>Properties</b>		
Dry Density	300 - 700 Kg/m <sup>3</sup>	For Roofs
	1000 - 1900 Kg/m <sup>3</sup>	For Floor screeds
Wet Density	600 - 800 kg/m <sup>3</sup>	For Roofs
	1100 - 1950 kg/m <sup>3</sup>	For Floor screeds
Thermal Conductivity	0.039 W/m.k°	
Compressive strength	0.5 - 2.5 Mpa	For Roofs – 28 days
	5 - 19 Mpa	For Floors – 28 days
Slump	7 - 16 cm	
Dry Time	7 days	
NCR	0.9	Noise Reduction Coefficient
<b>Surface Preparation</b>	<ul style="list-style-type: none"> <li>• Surface should be sound, clean, and free from laitance, dirt, dust, and loose materials.</li> <li>• New concrete should be left for 28 days before use.</li> <li>• Clean the concrete surface with steel brushes.</li> <li>• Wet the surface thoroughly for 1 hour before application.</li> </ul>	
<b>Mixing</b>	<ul style="list-style-type: none"> <li>• Mixing equipment is the same used for sand/gravel concrete mix.</li> <li>• Add water to the mixer.</li> <li>• Add the material to the mixer mix until a slurry is formed.</li> <li>• Mix at top speed (100-150rpm) for 3-5 minutes.</li> <li>• For information about the quantity of added water, please contact the technical office.</li> <li>• Discharge the slurry and check the density.</li> <li>• Rotate the drum when discharging the last of the load.</li> <li>• Do not wash the drum between loads</li> </ul>	
<b>Application</b>	<ul style="list-style-type: none"> <li>• It can be applied by crane and bucket or by pumping.</li> <li>• Insulating lightweight concrete shall be placed well compact to achieve the required level and slopes.</li> <li>• Insulating lightweight concrete thickness should not be less than 50mm.</li> <li>• After placing, it should be worked out with wood floats and steel trowels to be smooth</li> <li>• Water cure for 3 days.</li> </ul>	

Theoretical coverage	3 – 20 Kg/m <sup>2</sup> /cm thickness (according to density)
Packaging	15 Kg Sacks 700 Kg sacks
Shelf life & Storage	One year in its sealed packs stored under proper conditions
Health and Safety	<ul style="list-style-type: none"><li>• Use goggles-gloves and a breathing mask when applying.</li><li>• Apply forced ventilation in confined spaces.</li><li>• Remove splashes from the skin with a hand cleanser or soap and water.</li><li>• Eye splashes are to be washed with plenty of water.</li></ul>
Additional Information	<p><b>PROKEM</b> provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure.</p> <p><b>PROKEM</b> designs tailor made products should there be critical application that requires specific properties rather than our main range. For our customer's satisfaction.</p> <p><b>PROKEM</b> reserves the right to change the properties of its products.</p> <p>All orders are accepted subject to our current term of sale &amp; delivery.</p> <p>Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request.</p> <p><b>PROKEM</b> extends technical services to include after-sales support to assist users in the proper handling of our products.</p>