



**OPGC**  
Power for Progress

**ODISHA POWER GENERATION CORPORATION LIMITED**

**WATER LEAKAGE ARRESTING OF DIFFERENT STRUCTURES.**

	ITEM DESCRIPTION	UOM	QNTY	RATE (Rs)	AMOUNT (Rs)
1	<p><b>Injection</b></p> <p>Drilling &amp; fixing GI / MS nozzles of at least 6 mm dia with epoxy adhesive. The crack mouth has to be sealed with same adhesive.</p> <p>Flexible tubes, which are already fixed to nozzles, are opened and fixed to the injection gun. Low viscous 2 component injection resin (for moist or wet concrete) of approved manufacturer (SIKA/FOSROC/MYK/STP/PIDILITE/BASF or equivalent) shall be injected into the cracks. The mixed material shall be consumed within 10 minutes of mixing. After grouting operations the nozzles shall be cut after 24 hrs. flushing with concrete surface.</p> <p>The work shall be complete in all respect satisfactory to manufacturer (SIKA/FOSROC/MYK/STP/PIDILITE/BASF or equivalent) and EIC (Rate should be inclusive of procurement and supply of materials, surface preparation, transportation to job site/location, lifting, shifting, carriage, storage of material, ensuring safety, providing all PPES to worker, barrication of working area, drilling and fixing of nozzles, any necessary working platform, application of grouting materials, removal of nozzles, and finishing good of concrete surface as per satisfaction of EIC; with all tools and tackles.)</p>				
a	Installation of nozzles, fixing the same with cement or grout material and removal of the same with good finish.	Nos.	3744		
b	Material consumed in grouting.	KG	2164		
2	<p><b>Poly Urethane grouting:-</b></p> <p>Drilling &amp; fixing GI nozzles of 6 mm dia for a depth half of the member thickness at manufacturer recommended centre – to – centre distance or as instructed by Engineer Incharge with the help of cementitious quick fix product.</p> <p>Cleaning the cracks by injecting high pressure air through the nozzles.</p> <p>Pressure grouting with low viscosity epoxy injection resin with the help of injection gun or similar equipment at a steady pressure as recommended by manufacturer (SIKA/FOSROC/MYK/STP/PIDILITE/BASF or equivalent) or EIC. Cutting the nozzles and filling with epoxy material. The work shall be complete in all respect satisfactory to manufacturer (SIKA/FOSROC/MYK/STP/PIDILITE/BASF or equivalent) and EIC (Rate should be inclusive of procurement and supply of materials, surface preparation, transportation to job site, lifting, shifting, carriage, storage of material, ensuring safety, providing PPES to worker, barrication of working area, drilling and fixing of nozzles, any necessary working platform, application of grouting materials, removal of nozzles, and finishing good of concrete surface as per satisfaction of EIC; with all tools and tackles.)</p>				
a	Installation of nozzles, fixing the same with cement or grout material and removal of the same with good finish.	Nos.	7478		
b	Material consumed in grouting.	KG	2991		

3	<p><b>Cementitious Injection</b></p> <p>Injection should be done by fixing the nozzles at random and thoroughly to the structure and specially to all types of joints. Drill hole up to half of the depth of the concrete and fix GI nozzles manufacturer recommended nozzle ,manufacturer recommended C/C from the interior surface of retaining wall/base slab with the help of quick setting chemical/cementitious compound .</p> <p>Inject Cement slurry enriched with Non shrink grouting compound through the fixed nozzle in a manufactured recommended pressure with the help of hand operated or mechanical grouting pump. The material of injection grouting is as follows:Cement- as recommended by manufacturer(SIKA/FOSROC/MYK/STP/PIDILITE/BASF or equivalent) :Expanding grout admixture for anti shrink purpose with recommended dosage.</p> <p>W/C -as recommended by manufacturer (by weight).</p> <p>The work shall be complete in all respect satisfactory to manufacturer (SIKA/FOSROC/MYK/STP/PIDILITE/BASF or equivalent) and EIC</p> <p>(Rate should be inclusive of procurement and supply of materials, surface preparation, transportation to job site, lifting ,shifting, carriage,storage of material,ensuring safety,providing PPES to worker,barrication of working area , drilling and fixing of nozzles,any necessary working platform,application of groutng materials , removal of nozzles,and finishing good of concrete surface as per satisfaction of EIC; with all tools and tackles.)</p>				
a	Installation of nozzles ,fixing the same with cement or grout material and removal of the same with good finish.	Nos.	10785		
b	Material consumed in grouting.	KG	54572		
4	<p><b>PU grouting at Expansion joints</b></p> <p>Drill holes according to the nozzle diameter along the side of the joint which is leaking, at 45° angle. Use a Ferros scanner to avoid hitting the reinforcement.</p> <p>If the joint to be injected are 10mm wide or more at the surface, inject PU grout material into the joint. Spray the saturated foam with a small amount of water to activate the grout and create a surface seal.</p> <p>If water is flowing out of the cracks, or even coming out under pressure, inject polyurethane grout into the crack. The work shall be complete in all respect satisfactory to manufacturer (SIKA/FOSROC/MYK/STP/PIDILITE/BASF or equivalent) and EIC.</p> <p>(Rate should be inclusive of procurement and supply of materials, surface preparation, transportation to job site, lifting ,shifting, carriage,storage of material,ensuring safety,providing PPES to worker,barrication of working area , drilling and fixing of nozzles,any necessary working platform,application of groutng materials , removal of nozzles,and finishing good of concrete surface as per satisfaction of EIC; with all tools and tackles.)</p>				
a	Installation of nozzles ,fixing the same with cement or grout material and removal of the same with good finish.	Nos.	1056		
b	Material consumed in grouting.	KG	591		

5	<p><b>APPLICATION OF SEALANT AT EXPANSION JOINT</b></p> <p>Providing ,supplying and applying of PU sealant at expansion joint to a maximum size 40mmx25mm (with tolerance of (+/-)10mm),with 20mm baker rod etc, complete in all respect (SIKA/FOSROC/MYK/STP/PIDILITE/BASF or equivalent) and EIC  (Rate should be inclusive of procurement and supply of materials, surface preparation, ,transportation to job site/location ,lifting ,shifting, carriage,storage of material,ensuring safety,providing all PPES to worker,barrication of working area , drilling and fixing of nozzles,any necessary working platform,application of groutng materials , removal of nozzles,and finishing good of concrete surface as per satisfaction of EIC; with all tools and tackles.)</p>	Rmt	198		
<b>TOTAL AMOUNT (Exclusive of GST/GST Extra)</b>					
<b>AMOUNT IN WORDS:-</b>					