

**TECHNICAL SPECIFICATION:  
NUVOLATO FLOORING**

Working Stages	Workplace Description	Indicative estimated quantity	Unitary cost
Art. 1 Substrate	Arrangement of ground floor through its compaction and subsequent laying of concrete respecting the minimum slope limit of 1%, in compliance with UNI 11146/2005 regulation and work management prescriptions .		
	Arrangement and possible wells and machicolations leveling to guarantee a proper surface-water drain.		
Art 2. Support preparation	Supply, laying and subsequent leveling of the formwork. In case that some sideflexing formworks are required, ISOPLAM® PLAMFLEX shall be supplied for use.		
	Supply and laying of a 0,20mm vapor coat ISOPLAM® NYLON, ensuring a overlap of the nylon sheets of at least 20cm to prevent the rising damp on the surface. The overlap shall be sealed with ISOPLAM® PAPER RIBBON to prevent water infiltrations.		
	Supply and laying of a single layer of ISOPLAM® MEMBRANE DPM NONWOVEN (200 g/mm <sup>2</sup> ) to be paired and overlapped with ISOPLAM® NYLON coating sheets, so that the casting will continue to be wet during its kneading.		
	Supply and laying of ISOPLAM® INSULATING STRIP to isolate the outer edges.		
	Laying of ISOPLAM® PAVIGEL to protect the external surfaces from the concrete flow.		
Art 3. Steel Reinforcement	Supply and laying of an electrowelded reinforcement wire mesh Ø 6 mm, (Ø 8 mm recommended for heavy machine movement), with meshes of 20x20 cm and a one-mesh overlap. The ISOPLAM® STEEL REINFORCEMENT shall be widely spaced from the substrate with the use of iron or pvc ISOPLAM® SPACERS. Different heights are available in order to guarantee the right position during the casting. The mesh diameter depends on the expected load (binding and welding are not included in the overlap).		
Art 4. Concrete	Supply and laying of concrete for industrial floorings, in compliance with UNI EN 206 regulations, Exposure grade XC2. The concrete's resilience shall be of at least Rck 30 N/mm <sup>2</sup> (C25/30). The Cement/water ratio shall not be lower than 300 kg/m <sup>3</sup> .		
	The water/concrete ratio shall not exceed a 0,60 value. In case of use of the ISOPLAM® VIBRANTING MAGIC SCREED, the suitable consistency class shall be S2-S3.		

	In case of manual smoothing with an ISOPLAM® ALUMINUM SCREED, the proper consistency class shall be S4.		
Art 5. Seasonal Additives	Supply of ISOPLAM® COLDPAV, a super-accelerant for concrete with low temperatures, or ISOPLAM® HOTPAV, a retardant for concrete laying with hot temperatures.	1,50 lt/ 100Kg cement	
Art 6. Fibers	Supply of ISOPLAM® POLYPROPYLENE FIBERS to avoid superficial micro-cracks.	0,6 kg/m <sup>3</sup>	
Art 7. Concrete laying	Concrete laying, in compliance with the minimum slope limit of 1%.		
Art 8. Concrete Trowelling	Fresh concrete trowelling with ISOPLAM® POWER TROWEL, in order to prepare the surface for the hardener.		
Art 9. Hardener	Supply and application of two coats of ISOPLAM® DECO NUVOLATO, a colored hardener for industrial floors (see ISOPLAM® COLOR CHART), to be applied by sprinkling on fresh concrete and incorporated with manual or automatic trowel. <u>The quantity needed may vary depending on the required color or on the required load resistance.</u>	4,00 kg/m <sup>2</sup>	
Art 10. Finishing	Subsequent smoothing of the surface with a power trowel in order to obtain the type of finish prescribed by the Work Management.		
	Treatment with ISOPLAM® ANTI-EVAPORANTE or with E-RED EVAPORATION RETARDER to protect the floor from a fast drying.		
Art 11. Control joints	Realization of control joints, as prescribed by the Work Management, with ISOPLAM® DIAMOND DISC.		
	Supply and laying of ISOPLAM® JOINT FILLER, for filling the control joints. The joint-filler shall have the same thickness as the diamond disc.		
	Joints and overlay cleaning for a fast removal of the upper waste water released by the cutting machine, with ISOPLAM® PROFESSIONAL SQUEEGE.		
Art 12. Protection of the concrete	Supply and laying of ISOPLAM® PROTECTIVE TAPE NYLON and ISOPLAM® MEMBRANE-DPM ISOPLAM®, for protecting the surface from fast drying and avoiding micro cracks.		