

Project:	Pembroke Dock Marine
Client:	Port of Milford Haven
Location:	UK
Est Type:	OPA Primary Material Estimate

1.0 Foundations and Ground Works

Geotextile Membrane (Terram - 225m2/Roll)	58	Rolls
Imported Filling	172,000	Tonnes
Imported clean stone	15,000	Tonnes
Reinforced Concrete (Assume Batching Plant)		
• Cement	5,500	Tonnes
• Sand	16,000	Tonnes
• Aggregate	26,000	Tonnes
Mesh Fabric Reinforcement - A393	283	Tonnes
Bar Reinforcement	994	Tonnes

2. Frame and Facade

Structural Steel Frame		Tonnes
Insulated Box Profiled wall sheeting		Tonnes
Insulated Box Profiled roof sheeting		Tonnes
Metsec Purlins and sheeting Rails	194	Tonnes
Large Industrial Doors		Tonnes

3. Internal Fit-Out

Building Fit-out would be subject to specific end user specifications. However, the following can be assumed:

Large Overhead Gantry Cranes	8	Nr
Switchgear, power and lighting installations, office and welfare facilities.	30	HGV
Small Goods Delivery Vans	60	LGV

4. External Works

Geotextile Membrane (Terram - 225m2/Roll)	311	Rolls
Imported Filling	34,015	Tonnes
Imported clean stone	16,747	Tonnes
Reinforced Concrete (Assume Batching Plant)		
• Cement	3,000	Tonnes
• Sand	8,800	Tonnes
• Aggregate	14,000	Tonnes
Mesh Fabric Reinforcement - A393	278	Tonnes
Tarmacadam	7,783	Tonnes

Calculations

324146	tota tonnage materials
22	tonne hgvs
14733.90909	total hgvs
6	construction years
312	construction weeks
1560	construction days
9.44481352	Average HGVs per day