

ADDIPOR 55

Foam Grains for Producing The Multi – Use Light Weight Concrete

Description :

- **Addipor 55** is expanded and extruded foam grains with special size and grading used for producing the light weight concrete which has sufficient thermal and acoustic properties.

Composition of the light weight concrete :

- Graded siliceous Aggregates .
- **Addipor 55** .
- Special concrete admixture (Addicrete BV or BVF) .
- Mixing water .

* The density and the properties vary according to the mixing ratio as given in the following table.

- Examples of different mixtures of addipor 55 concrete and their properties:

Mixture Symbol	Components of Addipor 55 Concrete						Weight of concrete	Slump	Compressive Strength
	Cement	Aggregate		Addipor 55	Water	Addicrete Admixture			
		Sand	Coarse Size 1						
	Kg	Kg	Kg	Kg	liter	Kg	Kg/m³	cm	Kg/cm²
F1	400	60	30	24	210	12 (BV)	537	18	4.37
F2	400	140	40	24	230	14 (BVF)	620	22	6.27
2	385	425	-	20	175	3.8 (BV)	950	NA	NA
M1	450	400	-	22.5	235	8.5 (BVF)	1113	20	35.3
A	450	500	-	23.5	205	4.75 (BV)	1143	4	29
1	445	665	-	15	195	3.8 (BV)	1300	NA	NA
K1	480	500	600	8	190	7 (BVF)	1900	12	179.2
<div><div></div><div>• Actual dosage of addicrete and addipor 55 should be established from trial mixes to suit site requirements.</div><div>• Mixture symbol 1 , 2 gives 1 m³ of fresh light weight concrete.</div><div>• The reduction in concrete weight ranges from 13.6% to 75.6%.</div></div>									

Technical Data :(at 25° C)

- Concrete density varies from 537-1900 kg/m³ according to the ratio between the solid materials and the foam grains.
- The compressive strength varies from 4.4 - 179 kg/cm² relative to the change of the density and ratio of components.
- Density of **Addipor 55** grains = 20 – 22 kg/m³.
- Grain size 5 - 35 mm.

Fields of Use :

- Light weight sloping concrete for roofs.
- Light weight thermal insulation concrete.
- Light weight flooring concrete.
- Manufacture of Light weight bricks and pre-cast units.
- Losse insulation filled cells.

Advantages :

- Variable densities according to the requirements.
- Thermal and acoustic insulation.
- Non-Flammable.
- Economic and easy application method.

Direction for use :

- Mix Aggregate and cement.
- Mix water and admixture then add the mixture to the dry mix and remix for 2 minutes.
- Add Addipor 55 gradually during mixing until complete homogeneity.
- Place and cure the light weight concrete as for normal concrete.

Storage:

- 2 years minimum under suitable conditions.

Packages:

- bags 2.5 Kg.