

"foam concrete as concrete"

Foam concrete FC 300 - 400 kg/m³
from mixing plant:
for floors +85 m high pumping

iwtech

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Production plant

- Mixing plant:** same as for concrete production, before production of cement grout mixing center must be cleaned from residues of the previous concrete production
- Truck Mixer:** the same as for concrete transport, before production of cement grout mixing drum must be cleaned from residues of the previous concrete production
- Generators:** GFM 8 – mobile – for transport in public roads, for industrial production FC, see DS 101
- Pump:** Screw type, for instance Estrich Boy FHS 200

FC 350: in the concrete plant



filling of the drum by technical foam and cement grout, homogenization of fresh mixture during the transport, screw or piston pump on site

FC 350: pouring and levelling of FC



FC 300 - 400: also for high buildings



Designation, location:

Panorama, Bratislava, Slovensko

Type, floor area, height:

2 towers, apartments $\approx 36\,000\text{ m}^2$, 110 m - 33 floors

Realised foam concrete thickness:

55 – 65 mm

Foam concrete production/ distance from the construction:

mixing plant CEMEX CZ, Břeclav / 85 km

Finished floors delivery:

december 2014 – july 2015

FC 350 for +85m: used components



Mixing plant:

Mixing plant CEMEX, Břeclav (CZ)

Truck Mixer, CEMEX CZ

generator of technical foam GFM 8

Components:

CEM I 42,5R 127 kg

GGBS 126 kg

water 144 ltr

technical foam 770 ltr

Projected density of the foam concrete:

fresh / in stable humidity / dried kg/m³:
461 / 365 / 332

Technical foam:

foaming concentrate FC1
volumetric volume 80 g/ltr

FC 350 for +85m: transport & pumping in height



Mixing plant Břeclav (CZ) → site Bratislava (SK):
85 km ≈ 1 h 35 min

Pump:
Estrich Boy FHS 200/3

Hoses lenght/ transport height / floor:
175 m / 85,1 m / 27th floor

Internal hose diameter:
50 mm

Volumetric loss of foam concrete in +85,1 m:
< 5 %

Pumping duration 7 m³ to +85,1 m:
35 min

FC 350 for +85m: density in heights



Destination place / height:

at the end of transport hose / +85,1 m

Comparing of densities of foam concrete:

projected	measured
fresh	fresh
461	470 kg/m ³ (8 samples averages)

Measuring date:

18.6.2015

Measuring provided by:

iwtech s.r.o.

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Thank you for your attention



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