

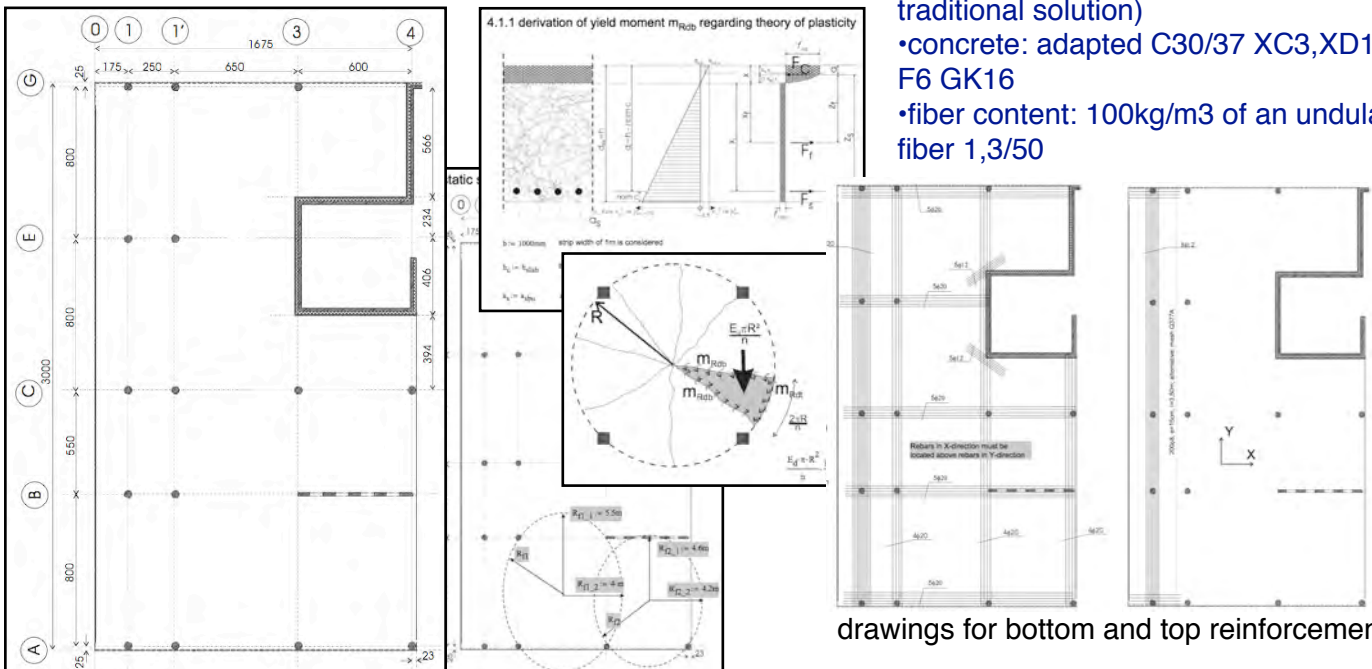
Project: Sipelgapesa parking deck,
Tallinn, Estonia
Hendeck™ elevated floors 2006

monolithic parking deck for multi storage apartment house made of Steel fiber reinforced concrete.



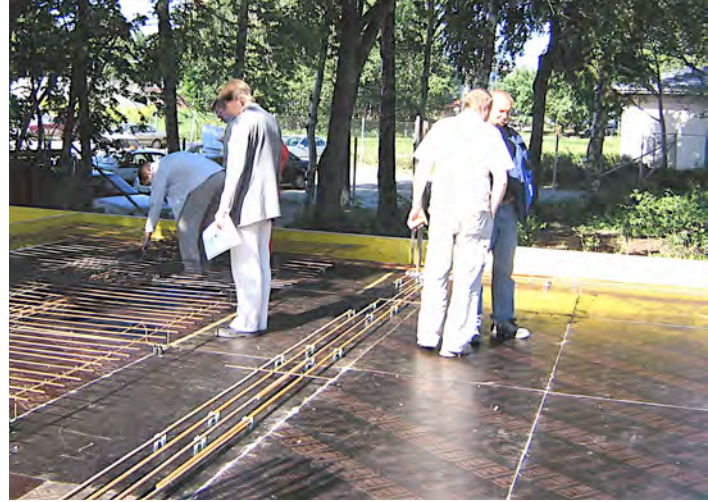
design service by Jürgen Mandl / Severstal-metiz
Design done according to DIN-standards on steel fiber reinforced concrete with regard to theory of plasticity.

- parking deck floor made of steel fiber reinforced concrete and Anti-Progressive-collapse-reinforcement
 - $d=250\text{mm}$ (originally 280mm with traditional solution)
 - concrete: adapted C30/37 XC3, XD1, XF2 F6 GK16
 - fiber content: 100kg/m³ of an undulated fiber 1,3/50

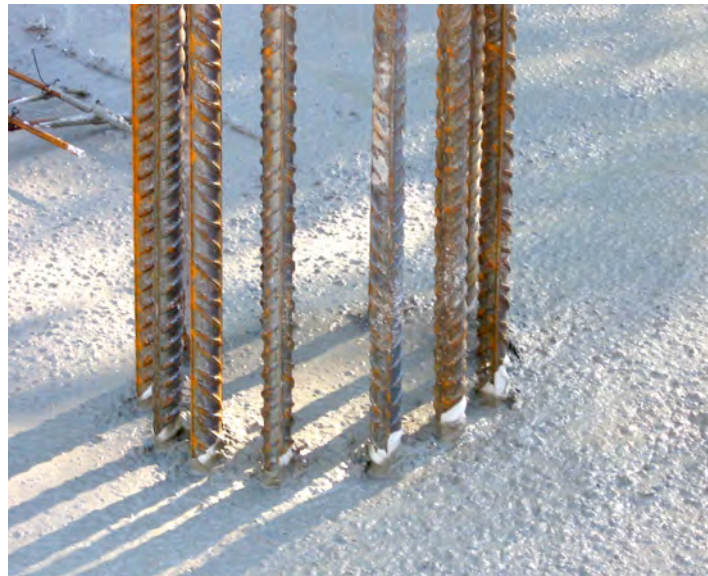


drawings for bottom and top reinforcement

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installation of APC-reinforcement in bottom layer on the day of casting concrete; in areas of statically determined structures a combination of sfrc and traditional reinforcement is regarded (here: top reinforcement $d=8\text{mm}$, $e=150\text{mm}$ at cantilever)



stable and low viscose (almost) self-compacting concrete according to recommendations by Severstal-metiz provide easy pumpability although the high fiber dosage.



high quality surface due to the low viscosity concrete (limited by the quality of the formwork)