Pfeifer INTERPLAN CONSULTANTS

CAR PARK
Feldberg (Germany)

NEW BUILDING

Client: Parkhausfond Objekt Feldberg GmbH & Co. KG, Stuttgart
E&G Fonds & Asset Management GmbH

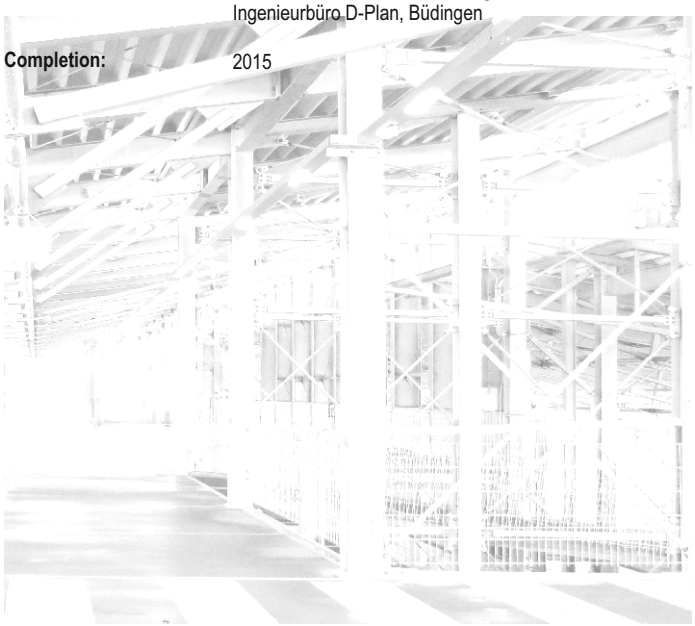
Certified Inspection Engineer: Prof. Dipl.-Ing. Matthias Pfeifer

Our services: Structural engineering inspection in accordance with regulations and standards:
Static calculations
Execution planning
Random monitoring of the structure during the building phase

Brief description: Construction of Germany's highest situated car park, with 16 parking levels, 1,209 parking spaces and stairwells with interior staff rooms and passenger elevators
- 6-storey open garage, length 48 m x width 6 m x height 25 m
- supporting structure made of steel columns and steel/concrete composite girders with precast concrete precast elements
- staggered floors in split-level construction
- ramps and carriageways made of reinforced concrete on steel girders, connected with shear studs
- floor slabs as composite girder construction (concrete and steel)
- stiffening via steel supports
- foundations over strip foundations
- extreme weather conditions, high snow load (ground snow load of 8.65 kN/m²), high wind load (dynamic pressure according to certificate of 1.8 kN/m²)
- wind and earthquake bracing is carried out in the roof via roof bracing and in the individual parking levels via the carriageway slabs
- loads are supported by wall bracing with round steel diagonal bracing
- roof construction made of underbracing steel structures, support of the high snow loads using steel supports,
- prefabricated reinforced concrete stairwells
- wooden curtain wall with horizontally laid wooden panels attached to the supports

Structural Engineers: Goldbeck Süd GmbH, Hirschberg
Ingenieurbüro D-Plan, Büdingen

Completion: 2015



Pictures / Illustrations: **Pfeifer**Consult