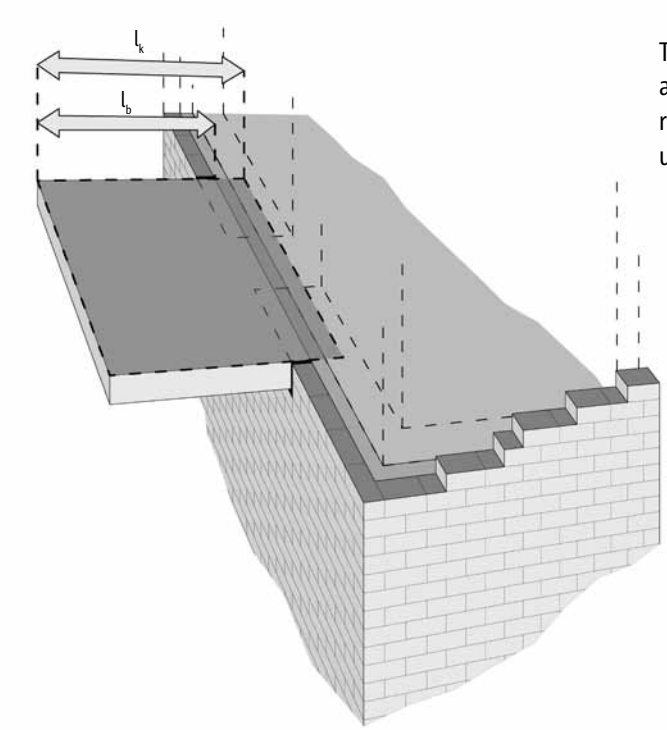
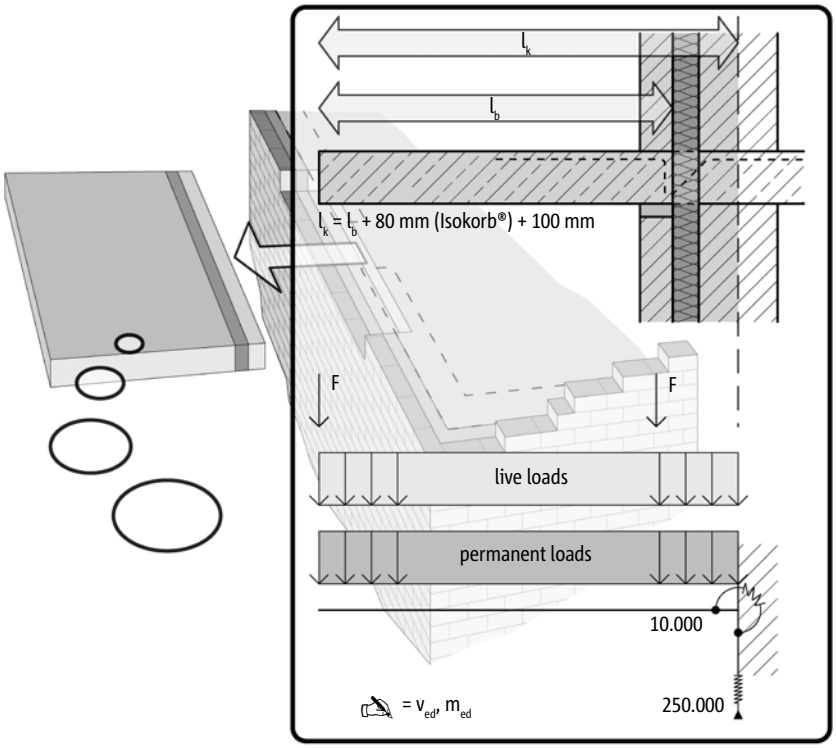
Schöck Isokorb®
FEM guidelines



To get the most realistic results for the aligment and loadtransfer of our Schöck Isokorb®, we recommend the following steps to be considered using FEM in conjunction with the Schöck Isokorb®:

l_k = system cantilever length used for the Isokorb® calculation
l_b = geometrical cantilever length from the Schöck Isokorb® (insulation body)



- Seperate the balcony from the internal structure
- Locate the Isokorb®-“bearing“ in areas were you would like to transfer loads into the internal structure.
- To simulate the Schöck Isokorb® perfomance please use the following spring stiffness: 10 000 kNm/rad/m (rotation), 250 000 kN/m² (vertical).
- The stiffness of the structure in the support area (slab/wall) should be taken as almost infinitely stiff.
- Calculate the internal forces for the balcony connection with Schöck Isokorb®.

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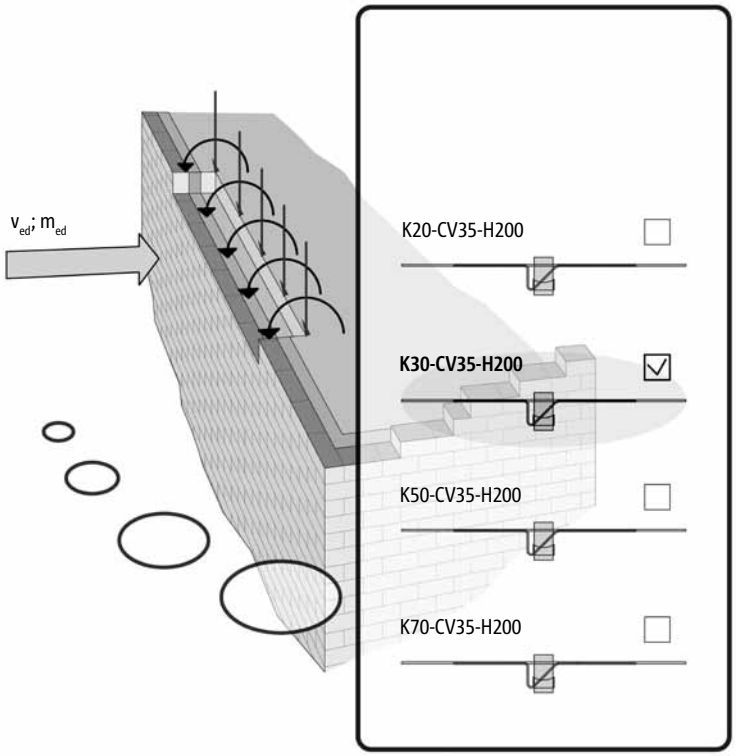

- The internal forces may only calculated by linear elastic methods.
- Select, according to the determined acting forces, the type and load capacity of the Schöck Isokorb®.
- The calculated values, m_{ed} and v_{ed} then to be applied on the outer supporting structure of the building.
- With large differences in stiffnesses between the support and connected element, the variance in moment and shear forces along leaner edge of the conection should be taken into consideration.
- Important for the modelling and design: the the Schöck Isokorb® can not take torsional loads.

Note

- Our Schöck Isokorb®, if it is a type to fix cantilevered balconies, is able to bear bending moments, but no torsional moments. Therefore, concerning FEM-modelling of the entire structure, the balconies are not to be modelled as a plate which is fixed monolithic to the internal structure. Instead of that its stress resultants have to be considered as external line loads (bending moments and shear forces) towards the edges of the RC floor slabs.