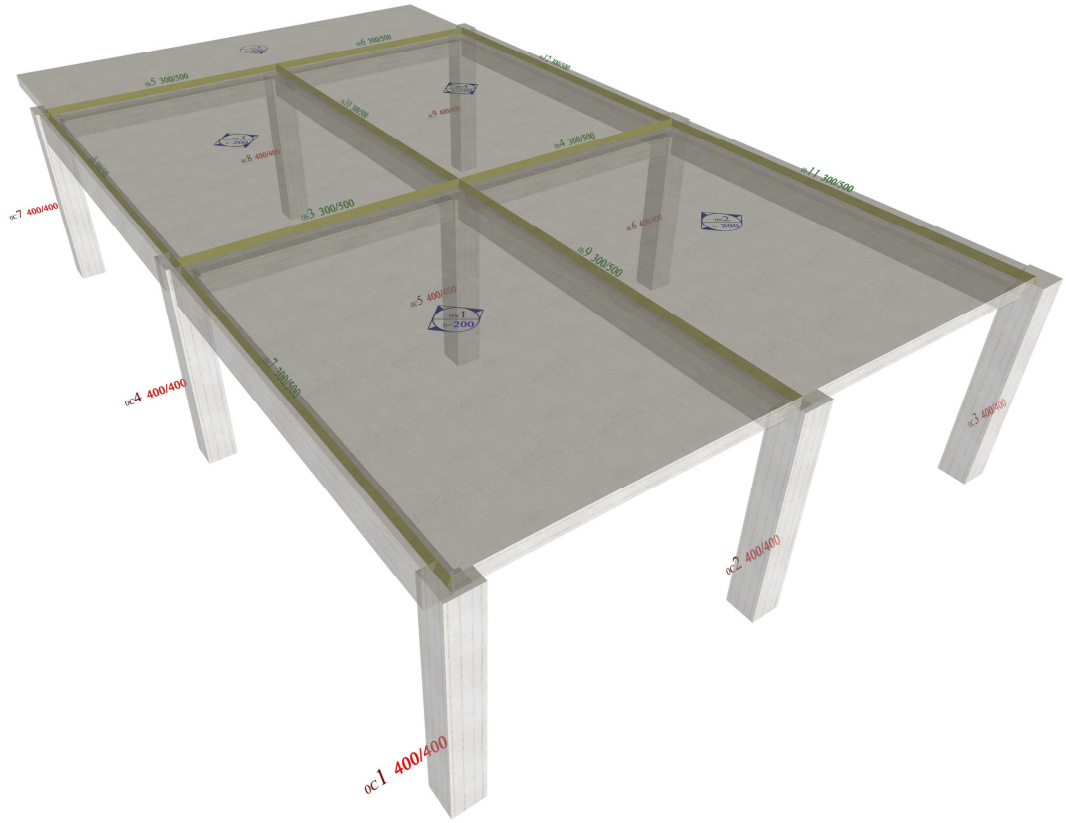

Figure 4.2.2-42: The actual stucture in 3D.

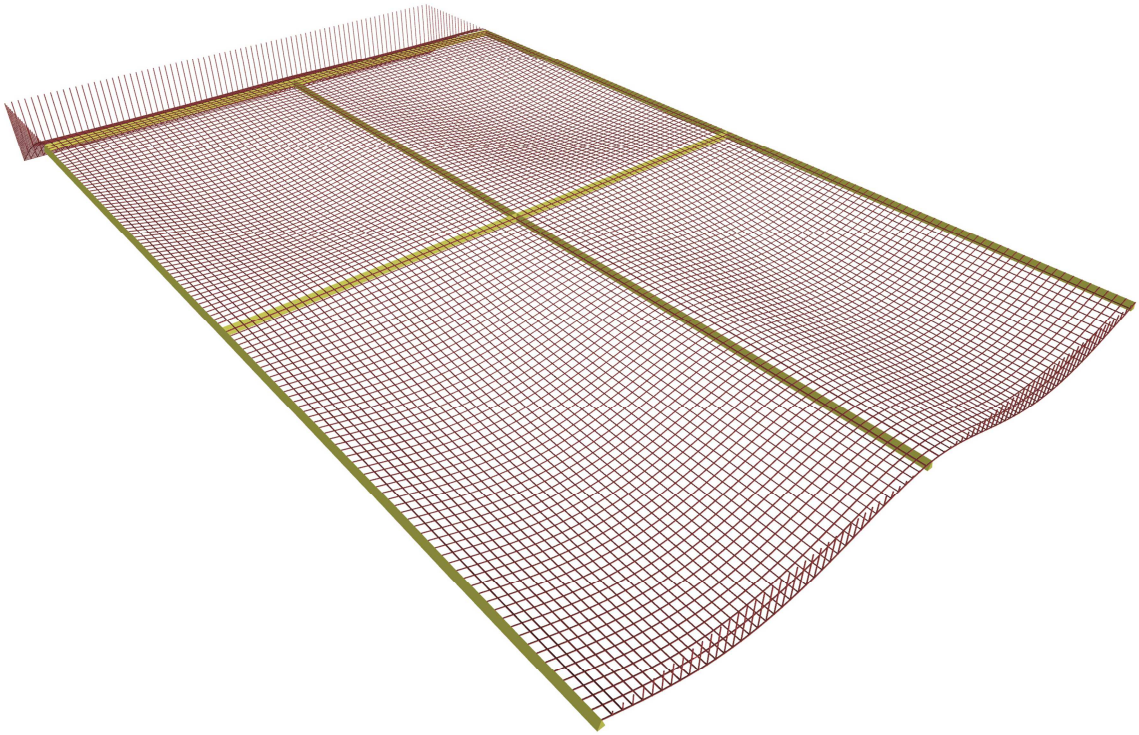

Figure 4.2.2-43: The deformation of slabs in 3D.

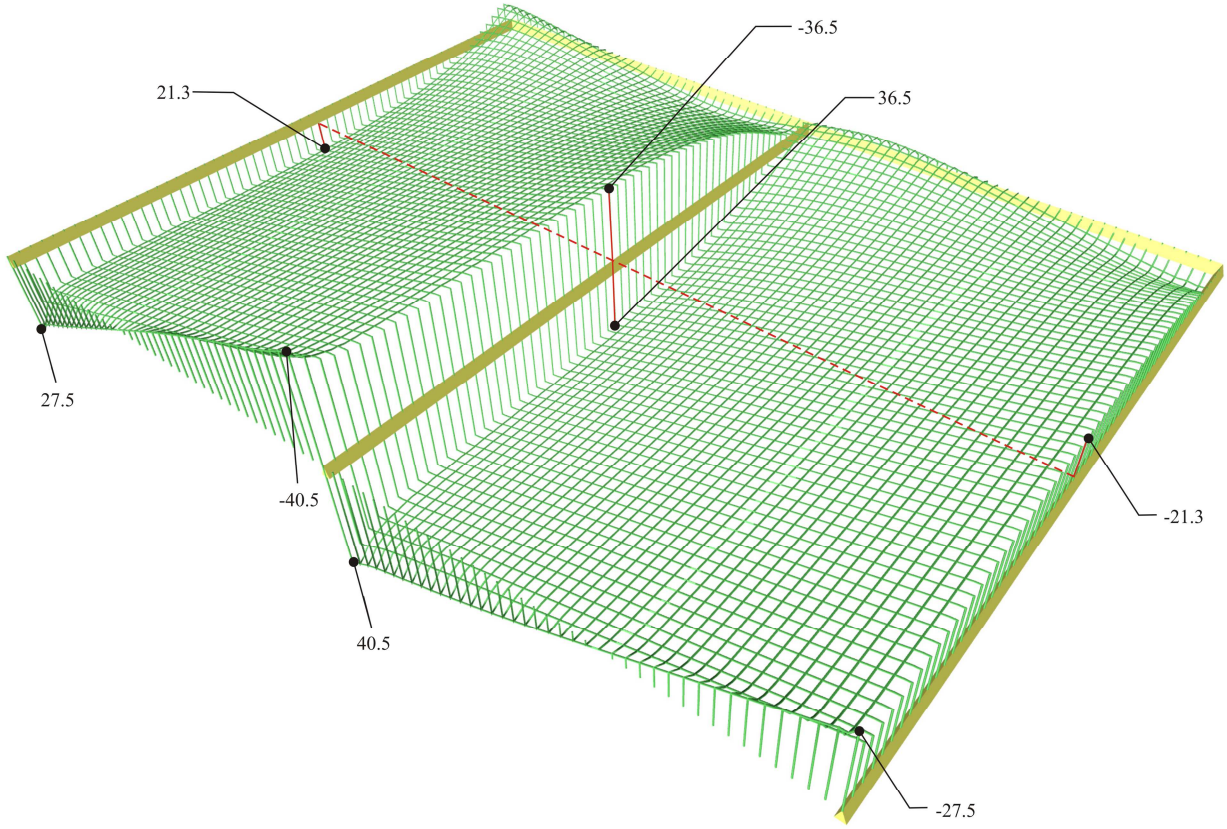

Figure 4.2.2-45: Distribution of shear forces [V_x] ([V_{11}] in 'FEM Results', detailed per 0.10 m) in 3D.

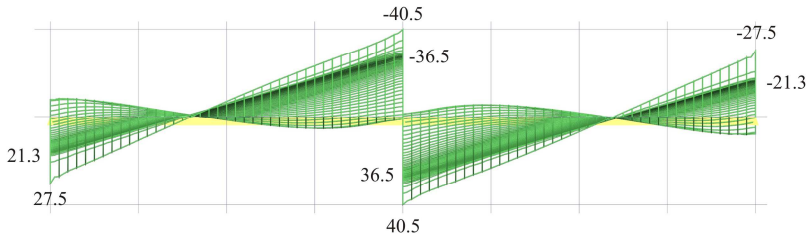

Figure 4.2.2-46: Front view of the 3D distribution of shear forces [V_x] ([V_{11}] in 'FEM Results').

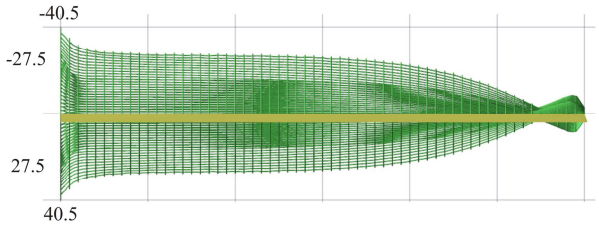

Figure 4.2.2-47: Side view of the 3D distribution of shear forces [V_x] ([V_{11}] in 'FEM Results').

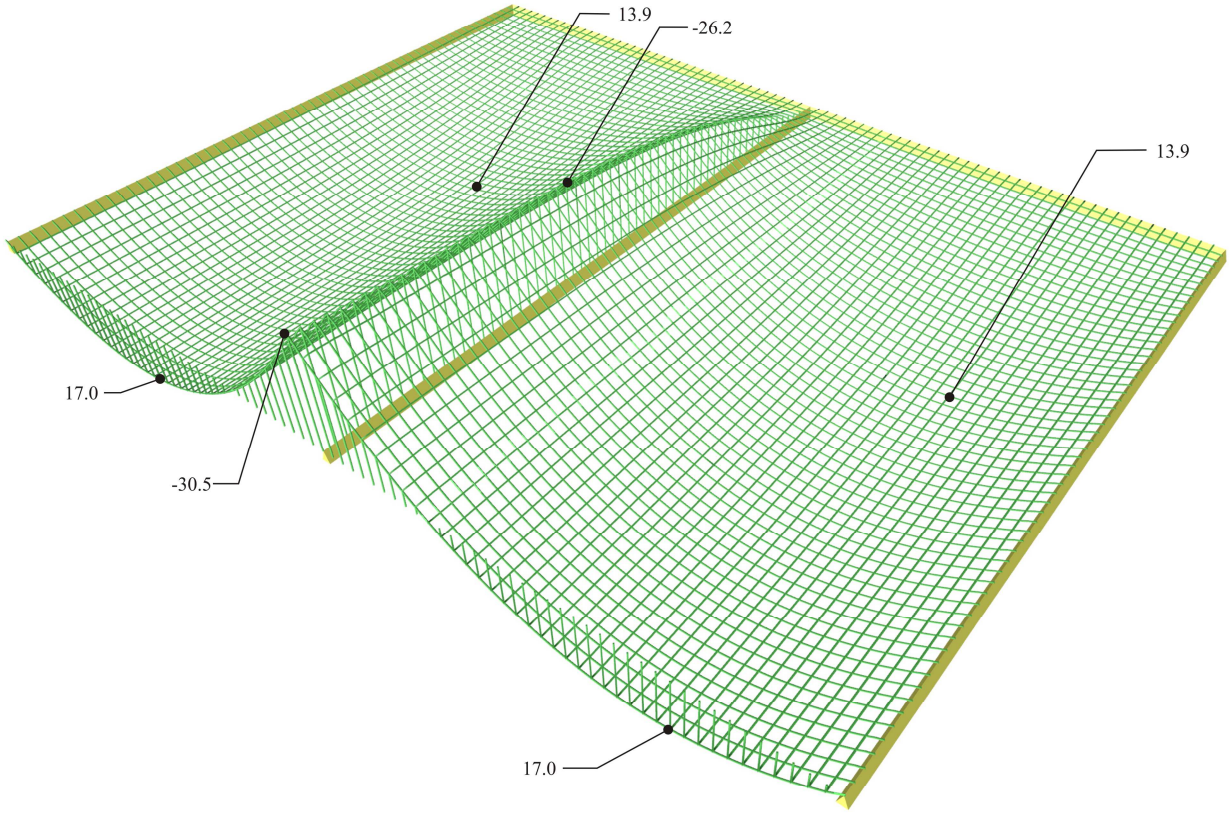

Figure 4.2.2-52: Distribution of bending moments [M_x] ([M_{11}] in 'FEM Results', details per 0.10 m) in 3D.

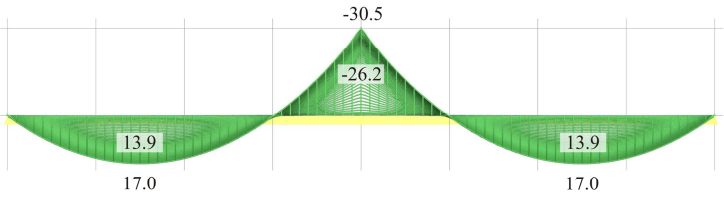

Figure 4.2.2-53: Front view of the 3D distribution of bending moments [M_x] ([M_{11}] in 'FEM Results').

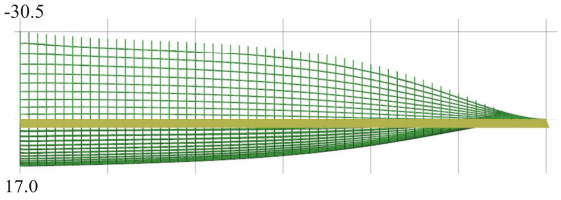

Figure 4.2.2-54: Side view of the 3D distribution of bending moments [M_x] ([M_{11}] in 'FEM Results').

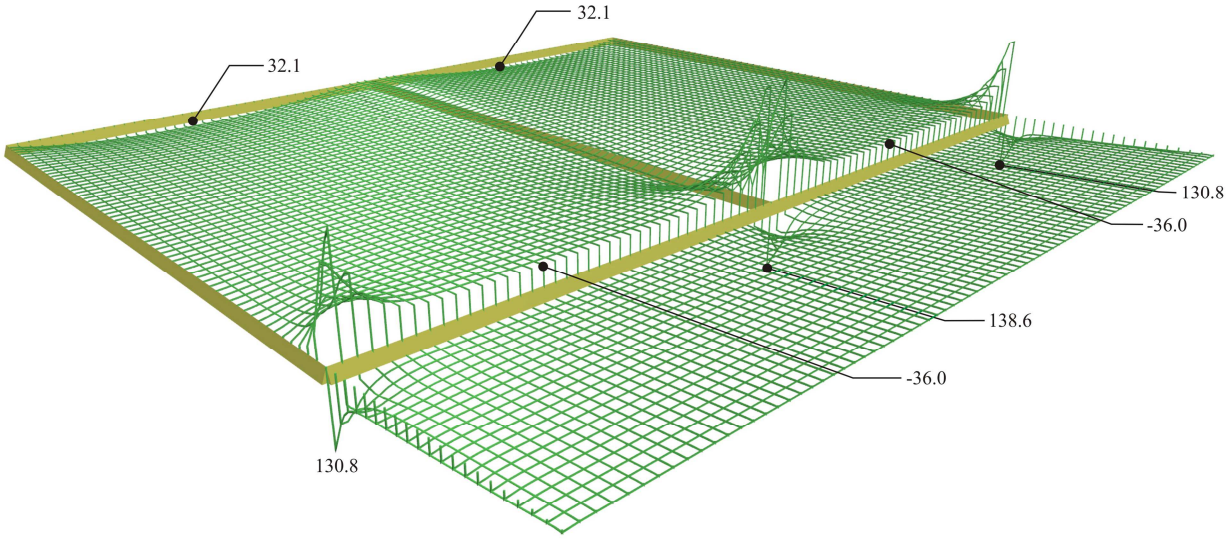

Figure 4.2.2-63: Shear forces [V_y] ([V_{22}] in 'FEM Results', detailed per 0.1 m) extend only in the regions of middle supports.

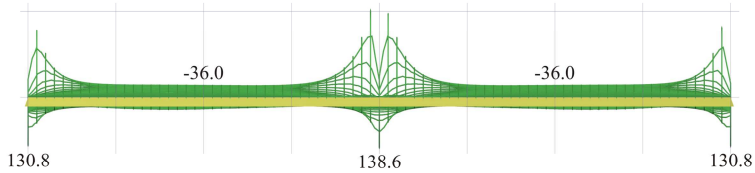

Figure 4.2.2-64: Front view of the 3D distribution of shear forces [V_y] ([V_{22}] in 'FEM Results').

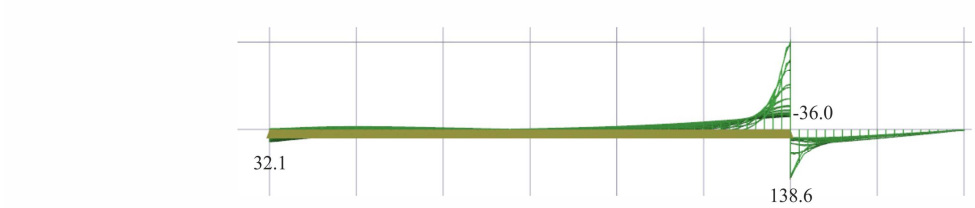

Figure 4.2.2-65: Side view of the 3D distribution of shear forces [V_y] ([V_{22}] in 'FEM Results').

At the points of the slab (in this case of the cantilever) where fixed transverse support exist, numerous peaks are created, mainly for shears (in this case 130.8 and $138.6\ kN$) and secondarily for moments. These regions are forced to carry large part of the load of the adjacent slabs mainly near the supports. This is the reason why the occurrence of high shears shortly before and shortly after the support. However, these shears are taken into account in detail by considering their average values in a width, e.g. 1.0 m, which equals to $47.0\ kN$ ('Slab Results').

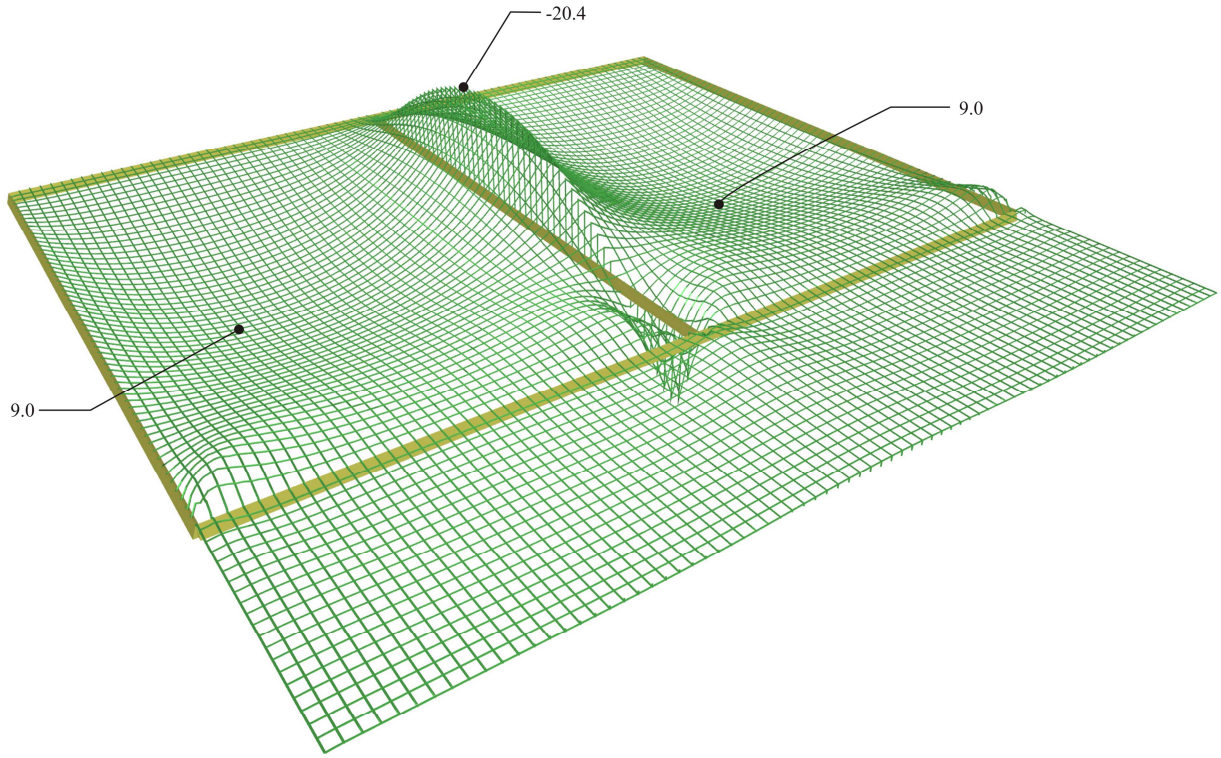

Figure 4.2.2-67: Distribution of bending moments [M_x] ([M_{11}] in 'FEM Results', detailed per 0.10 m) in 3D.

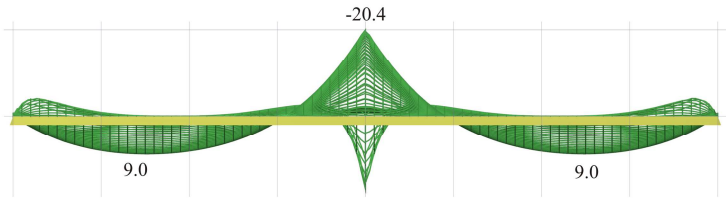

Figure 4.2.2-68: View of the 3D distribution of bending moments [M_x] ([M_{11}] in 'FEM Results').

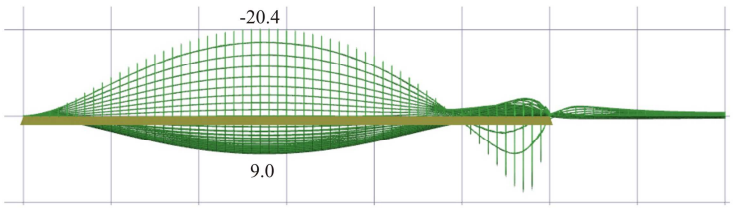

Figure 4.2.2-69: Side view of the 3D distribution of bending moments [M_x] ([M_{11}] in 'FEM Results').

The positive peak moments forming a sharp "hole", at the region of the support exactly behind the cantilever, results from the negative load created at this region by the cantilever's moment.
Notice that the influence of the strong cantilever, both in negative and positive moments, decreases in a small distance from the cantilever support.
The insignificant differences in values of moments M_x between 'FEM results' and 'Slab results' are due to the relatively small curvature of the 3D moment diagram M_x.