

ODTÜ KIBRIS'LA BİLİM EĞLENCELİDİR.

CVE 410-CIVIL ENGINEERING DESIGN METU NCC MALL - Structure 1

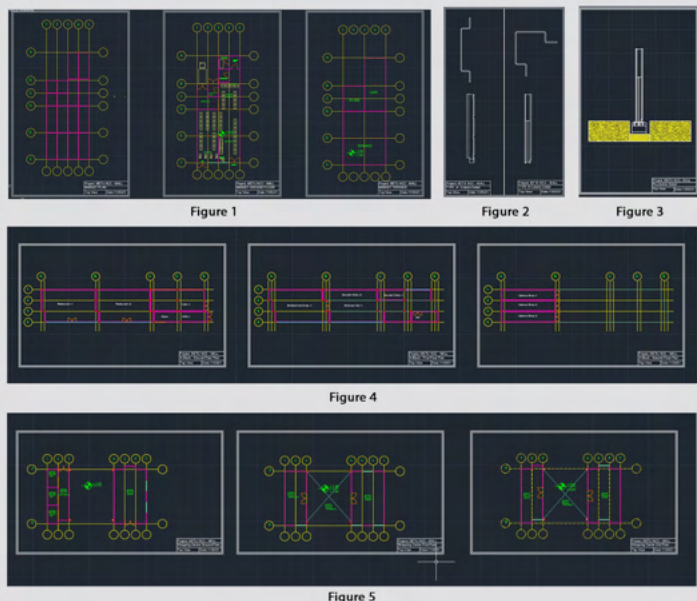
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A shopping mall has been designed which is located in Middle East Technical University Northern Cyprus Campus by shipping containers. Site investigation was done, and it decided to design in coordinates of 35°14'59" K and 33°01'09" D. Specified area is approximately 7800 m². it was placed in front of KALTEV building in order to supply liveliness around KALTEV. Specified area is close to engineering laboratory, classrooms, English prep school and culture and convention center. Most of the Metunians spend their times in these areas so; location of METU NCC MALL was selected around these places. While selected area was examined, it was observed that area is accessible for transportation. Area is available for both pedestrian and vehicle entrance. Existing main area of university campus is inadequate, and lack of some essential shops is problematic for people who are in university environment. For instance, restaurants, coffee shops, bookstore and supermarket of campus are not sufficient for available population. The METU NCC MALL was designed by considering all the deficiencies.

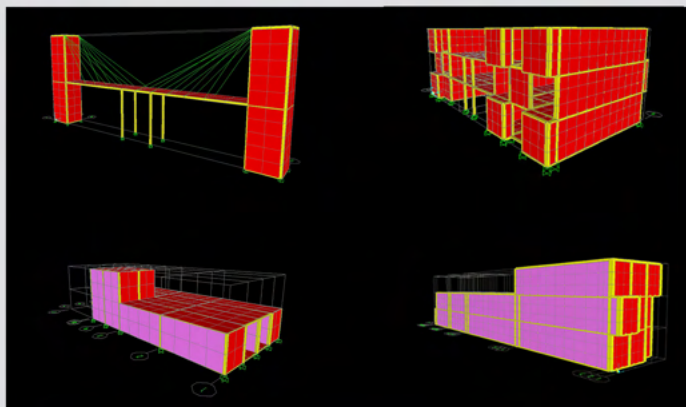


Figure 1 : Storey plan of Market building
Figure 2 : Type A and Type B column detail
Figure 3 : Embedded connection was used to transfer moment from building to foundation
Figure 4 : Storey plan of main building
Figure 5 : Storey plan of store building



Standards : TS-498, TS-500
Wind speed : 130 m/s in Güzeyurt/KKTC
q=1.1 kN/m²
Live loads : 5 kN/m² for interior places
2kN/m² for the roofs and the terraces

Load Combinations : Live, Dead and Wind
1,4G+1,6Q
1,0G+1,3Q+1,3W
0,9G+1,3W



Material : ISO Shipping Container HC40' and HC20'
Constraint : Diaphragm / Restriction : z-direction
Restraints : Fixed restraints are assigned