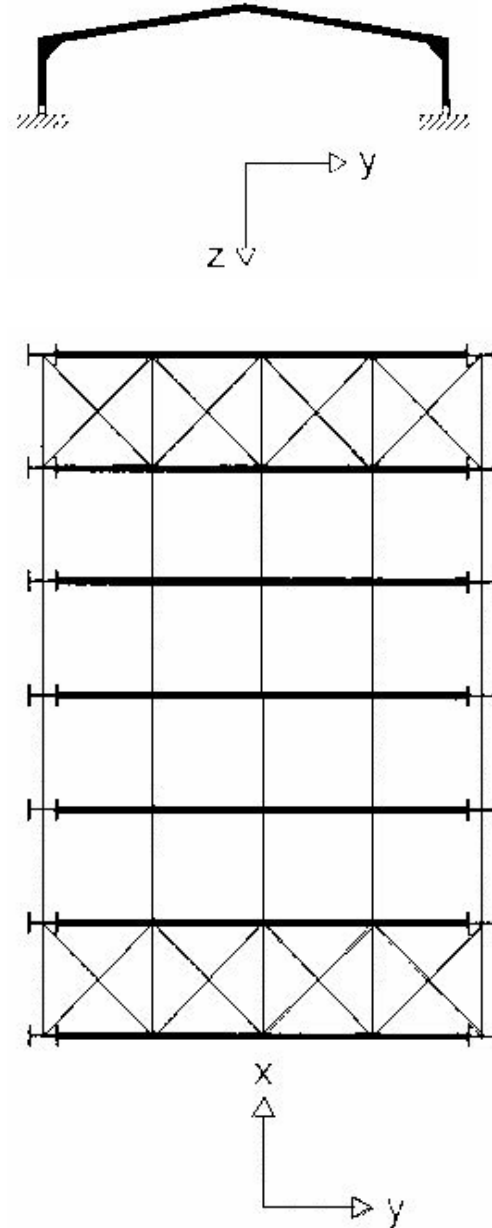
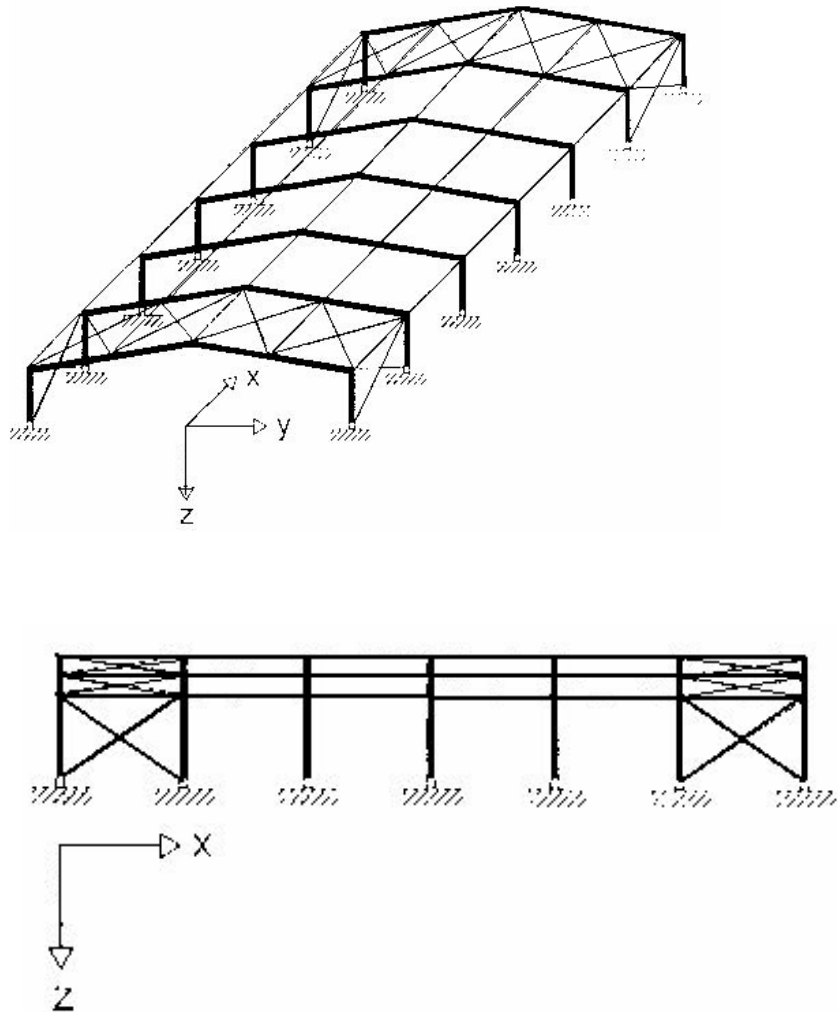
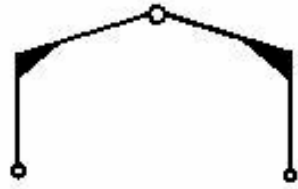


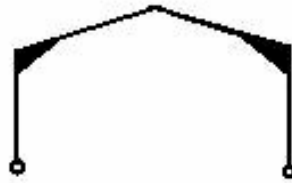
# Keretfőtartós rendszer



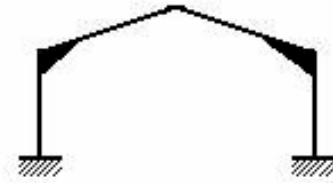
# Keretfőtartók



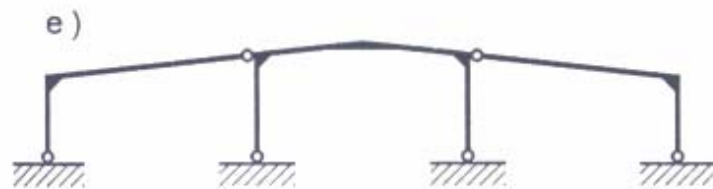
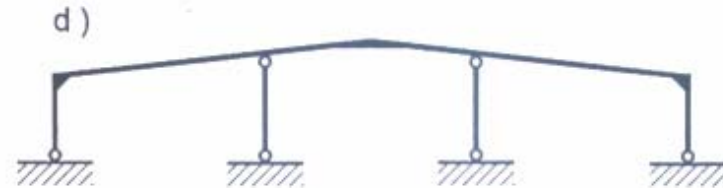
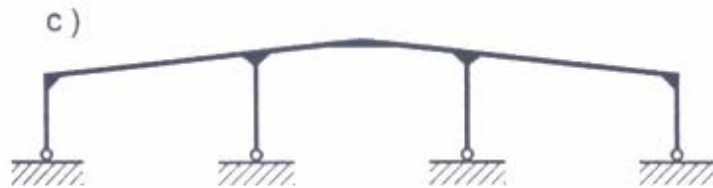
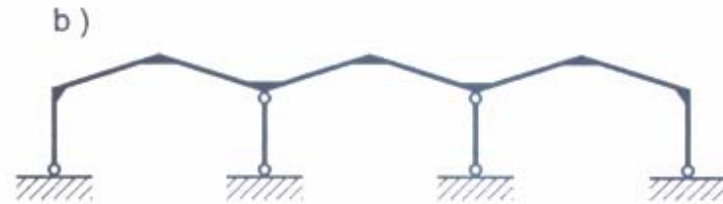
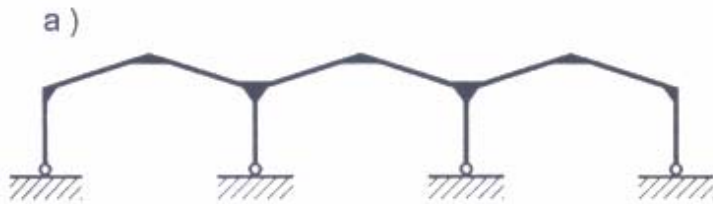
Háromcsuklós keret



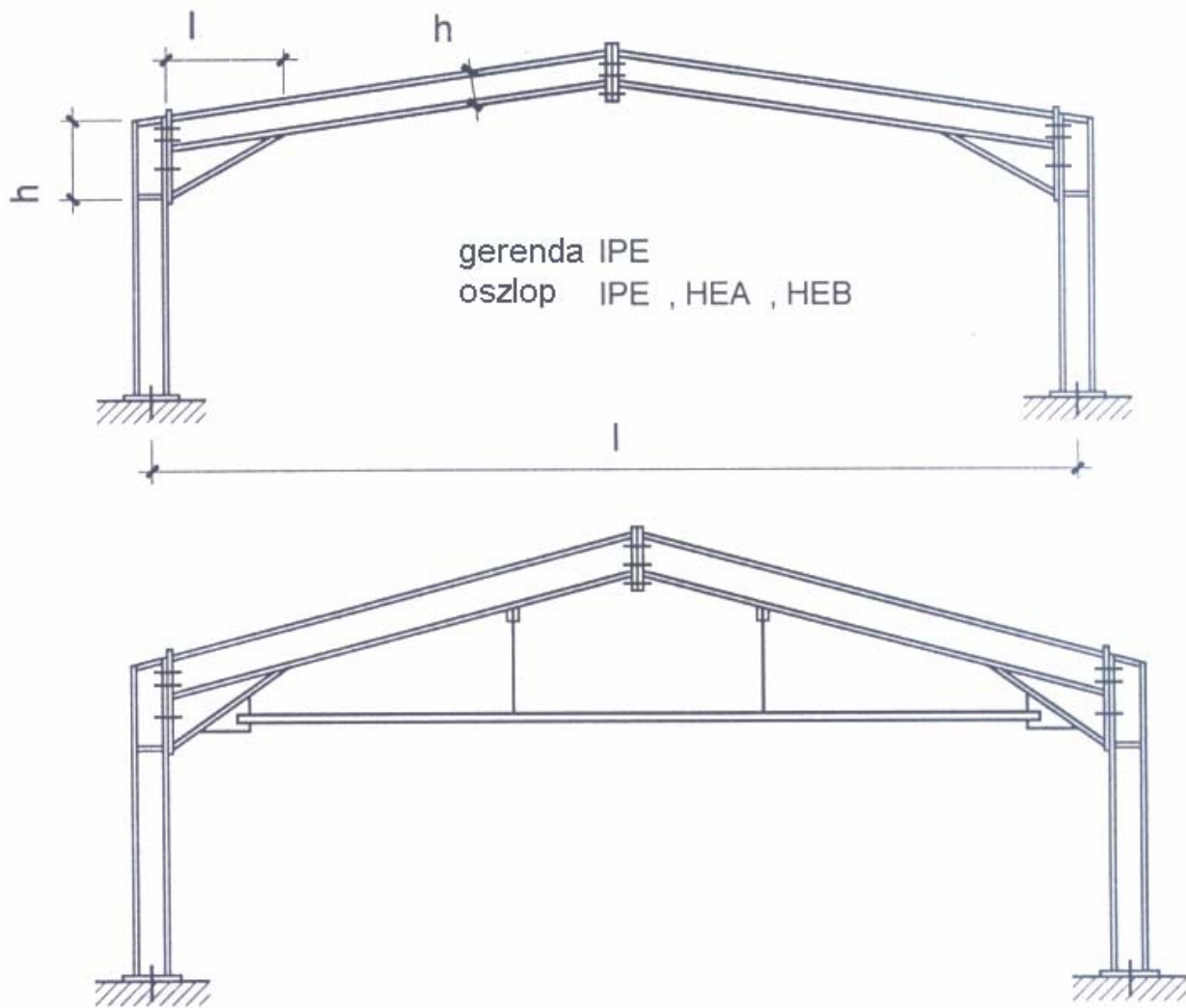
Kétsuklós keret



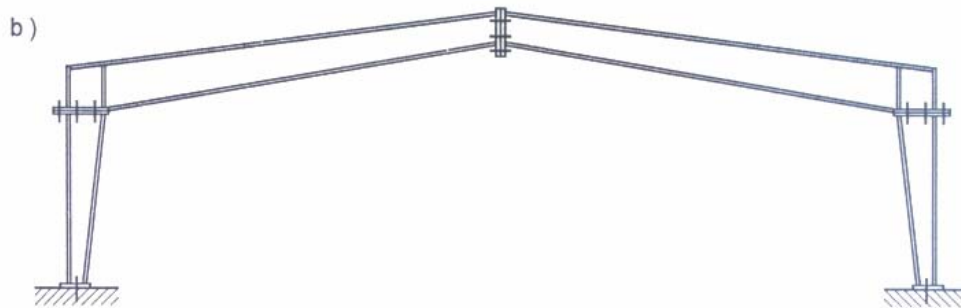
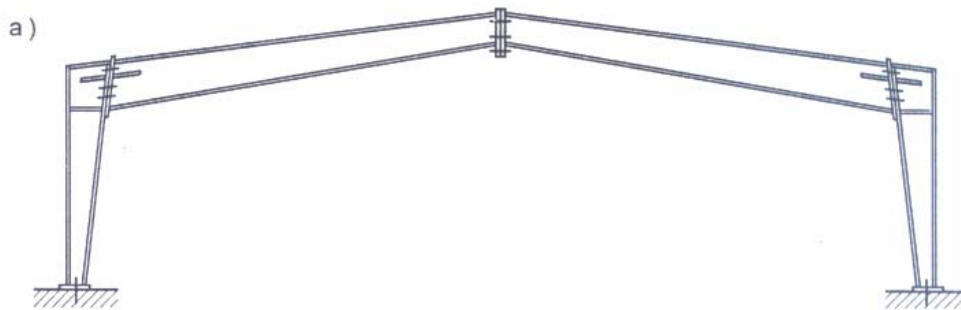
Befogott keret



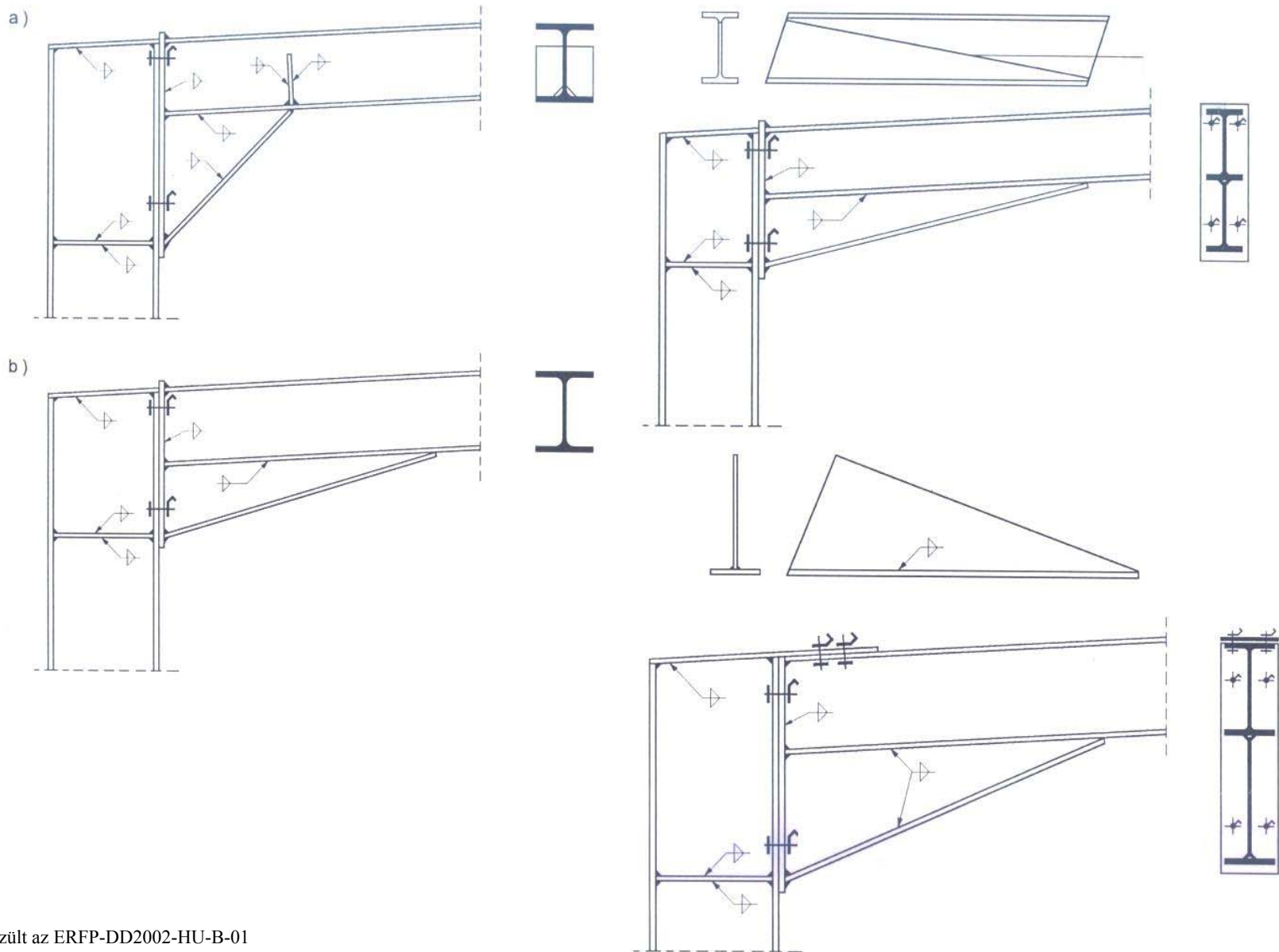
# Keretfőtartók: hengerelt szelvények



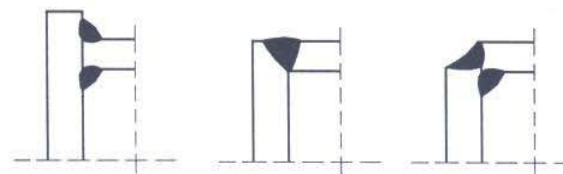
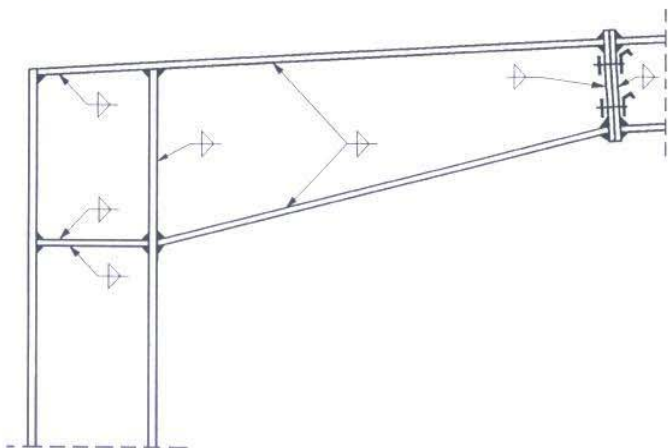
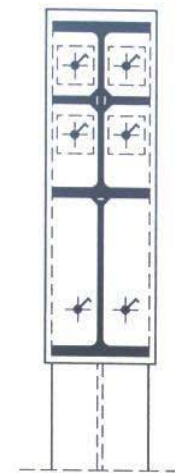
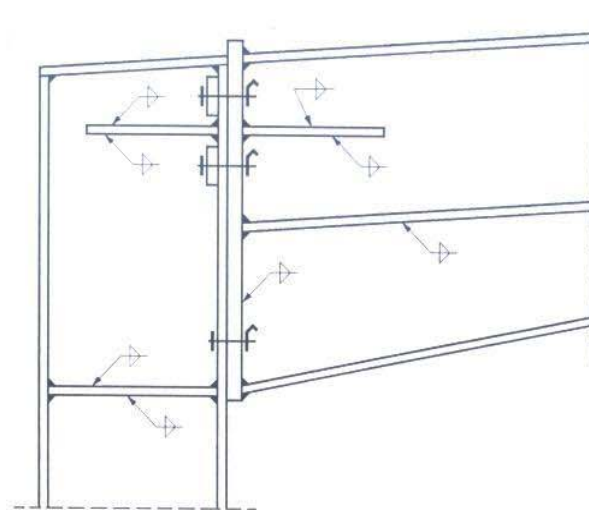
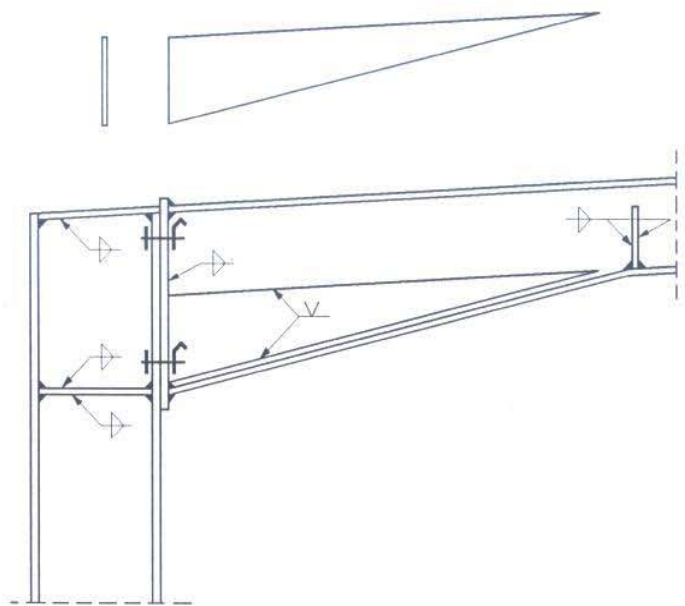
# Keretfőtartók: hegesztett szelvények



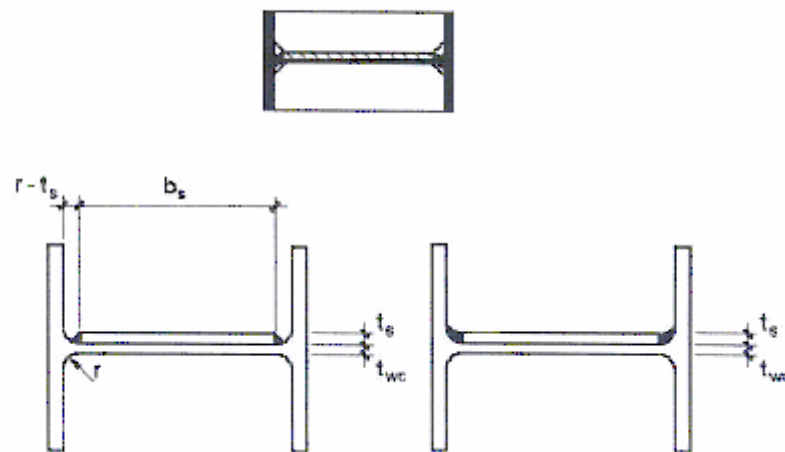
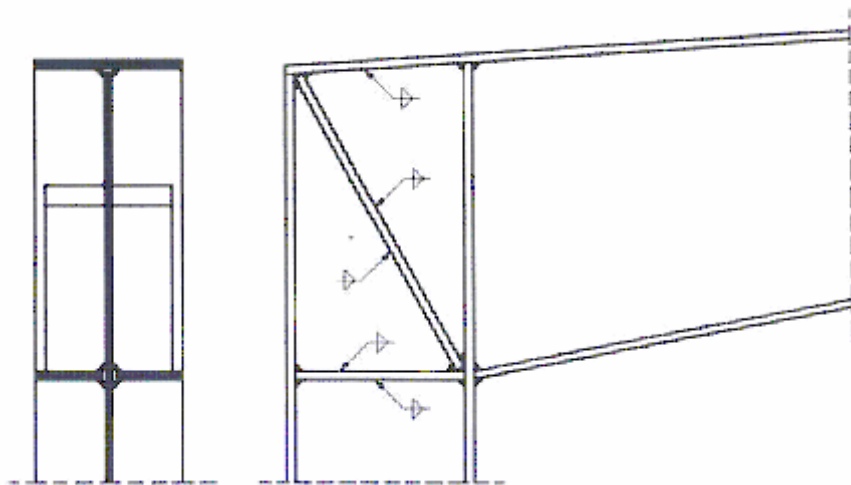
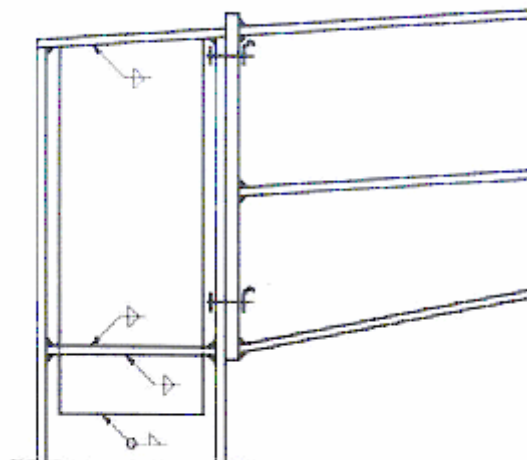
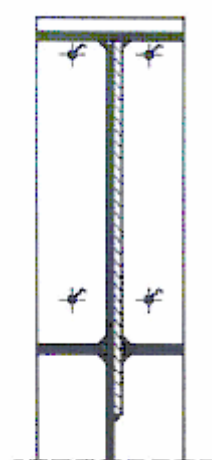
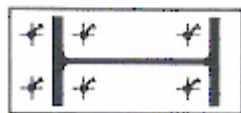
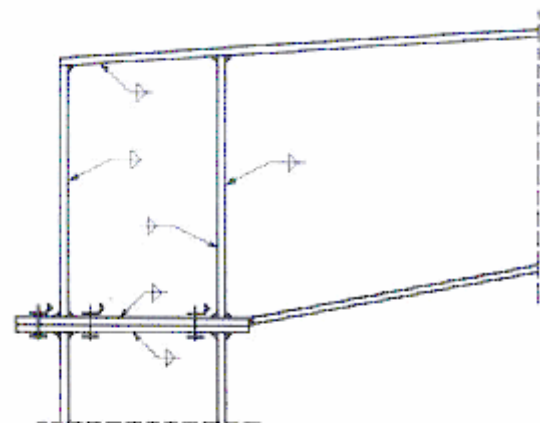
# Keretsarkok I.



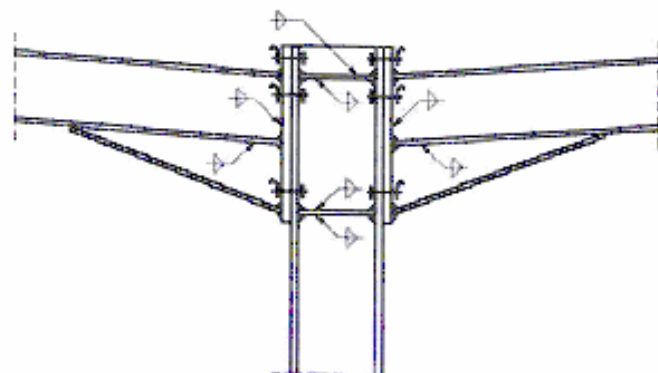
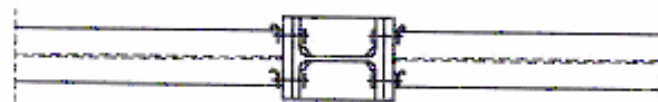
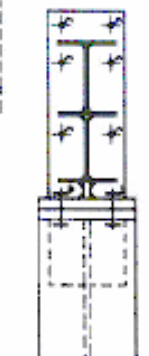
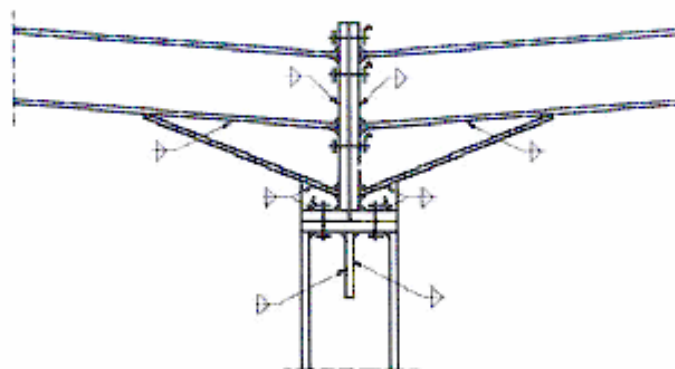
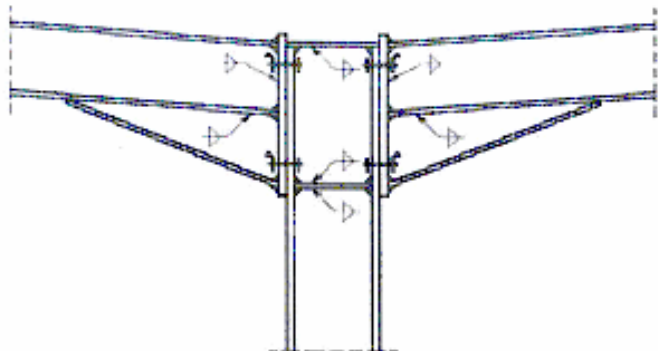
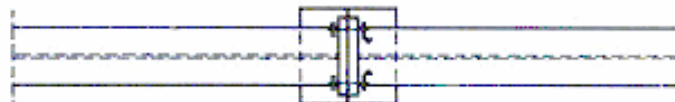
# Keretsarkok II.



# Keretsarkok III.

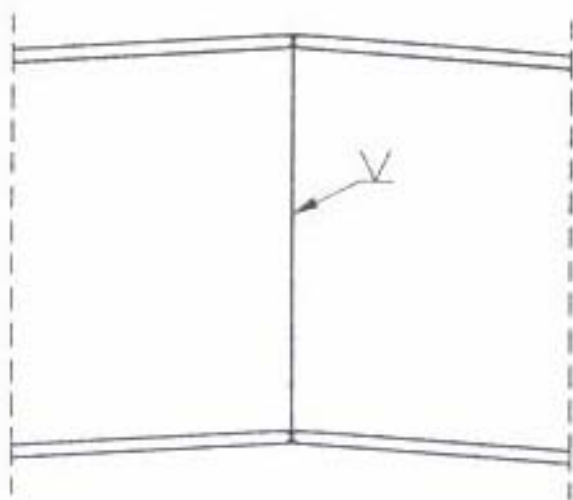


# Keretsarkok IV.

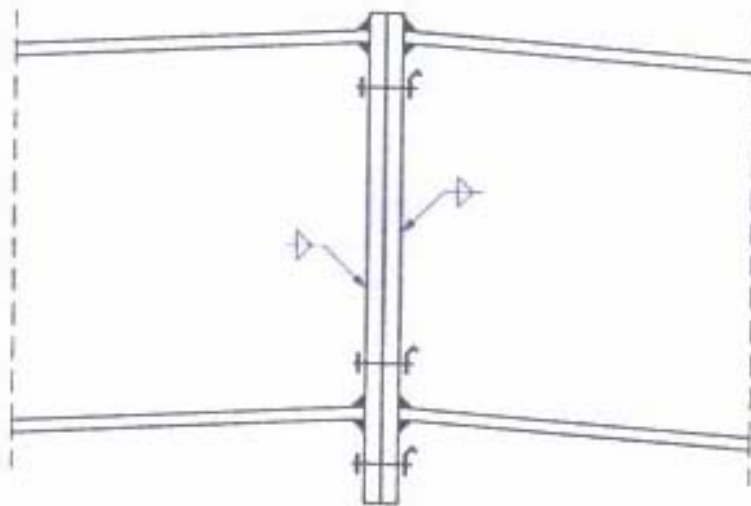
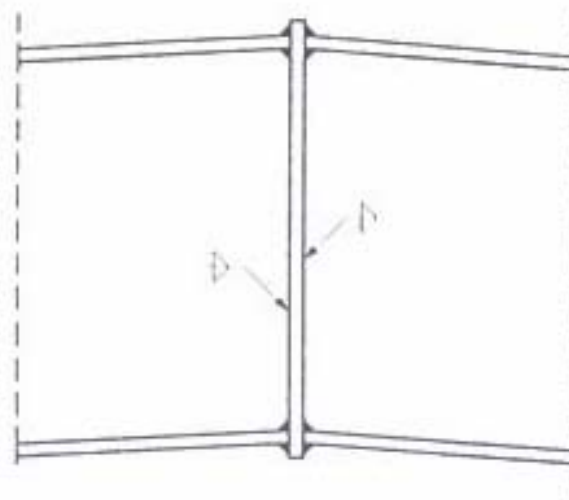




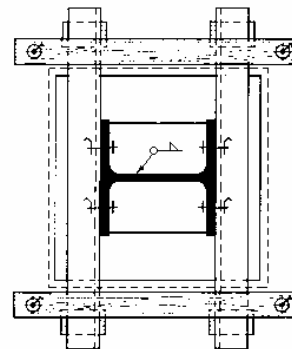
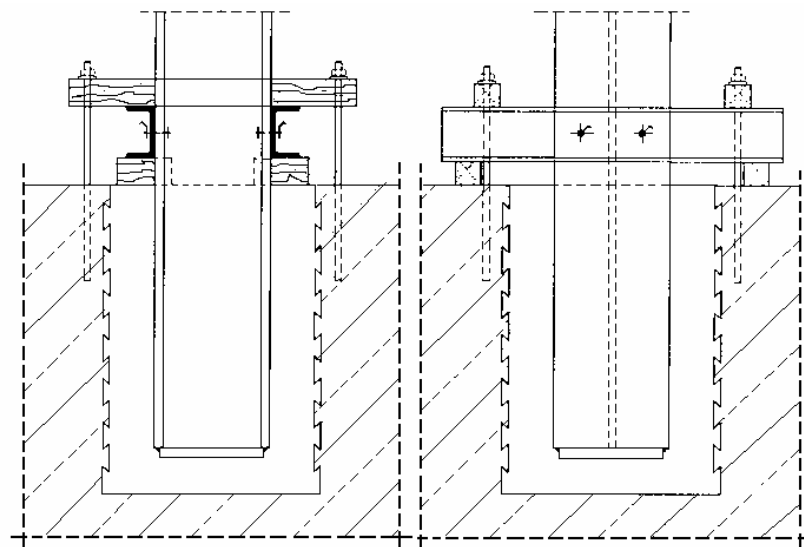
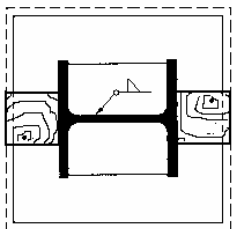
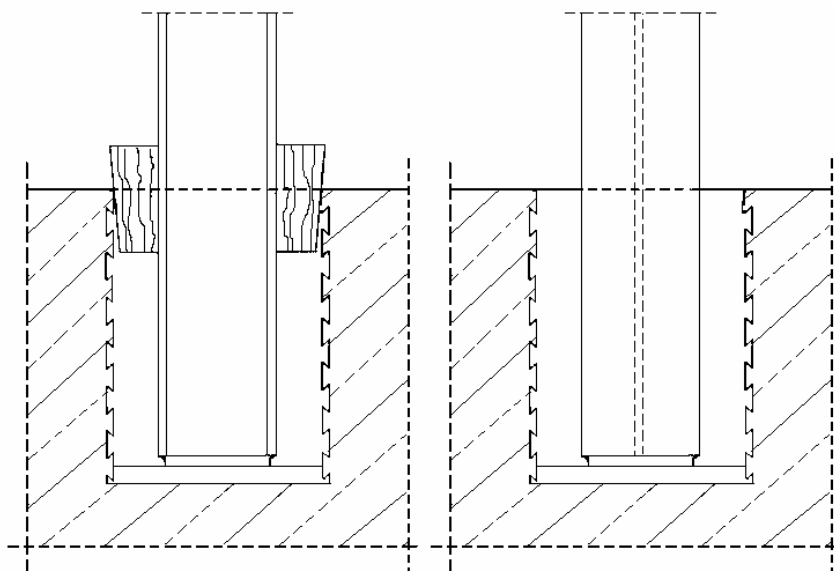
a)



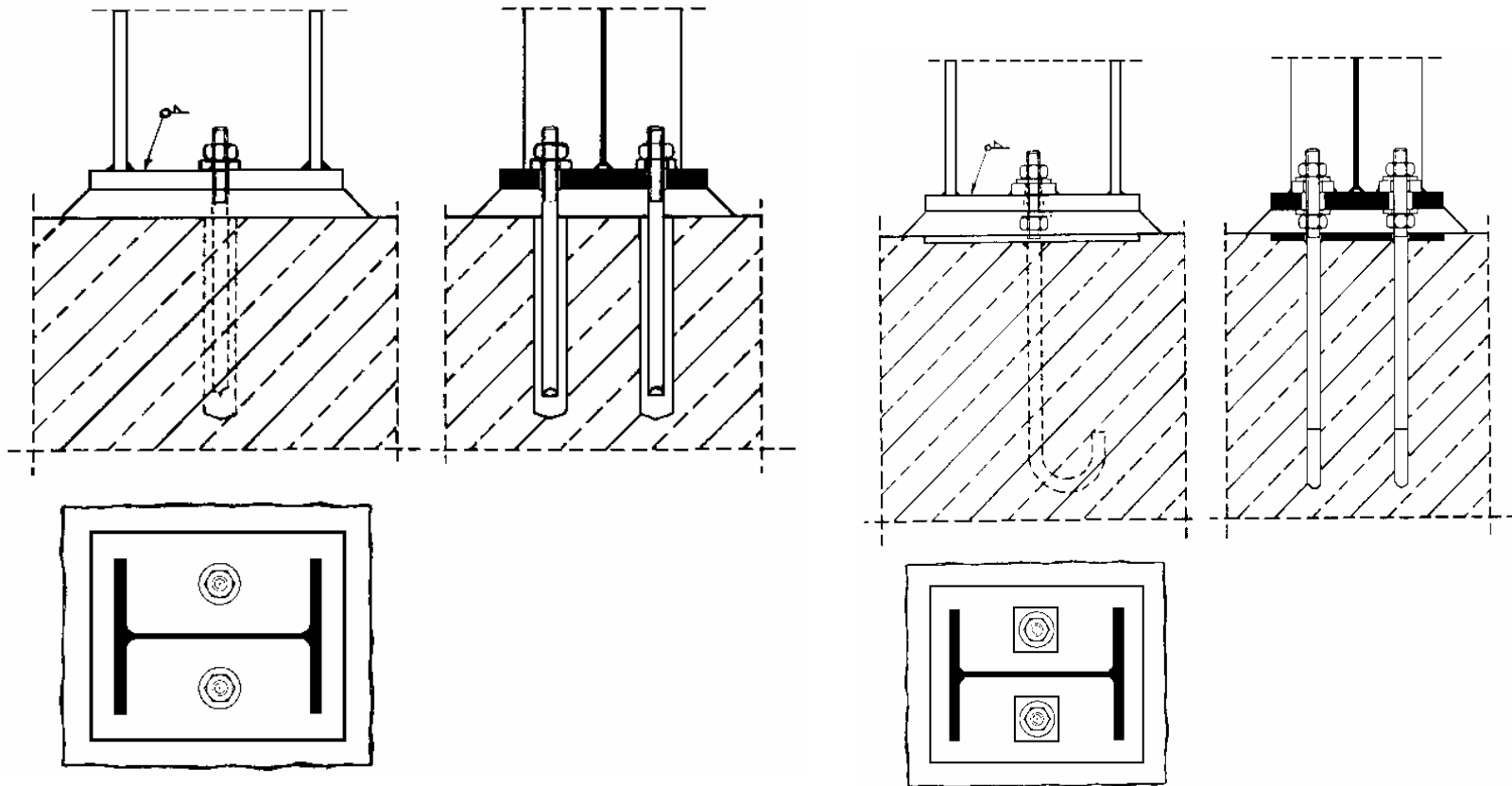
b)



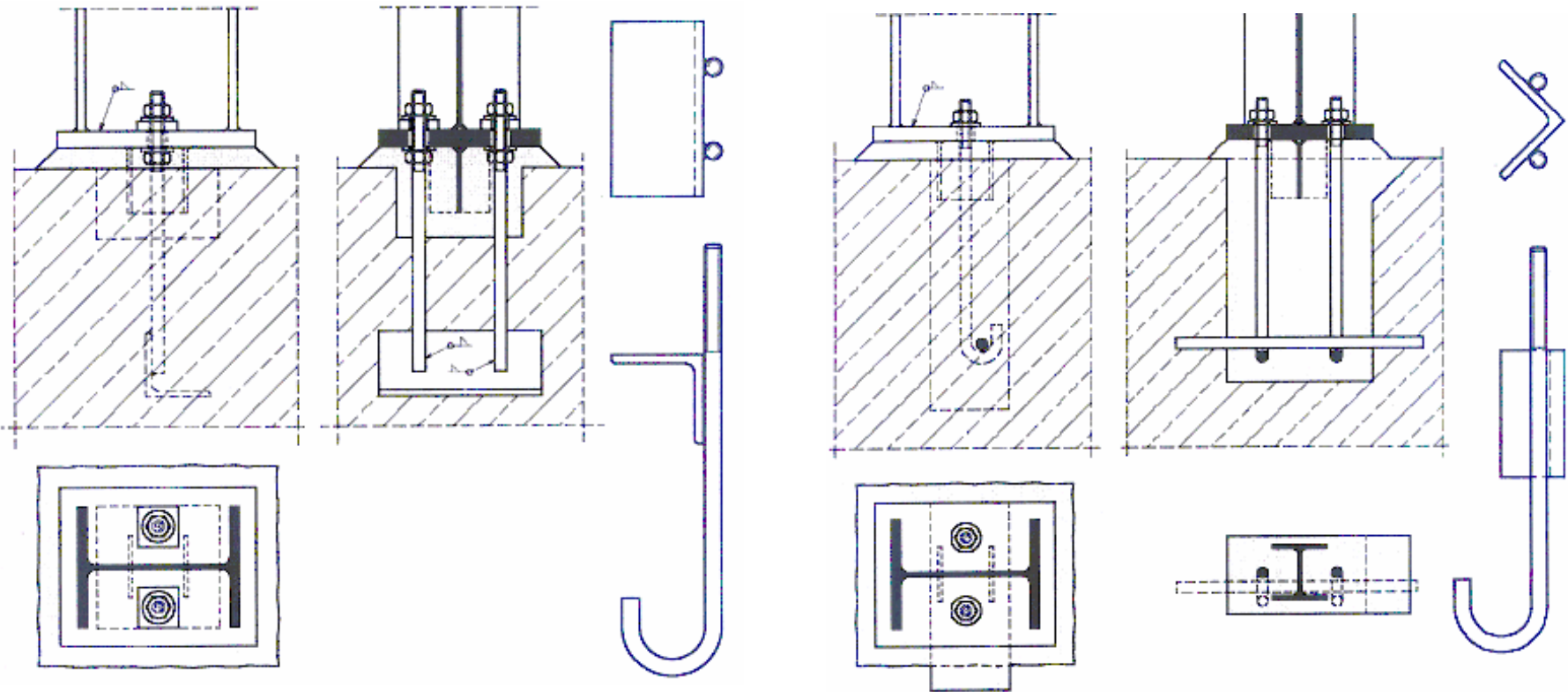
# Kehelyalapba befogott oszlop



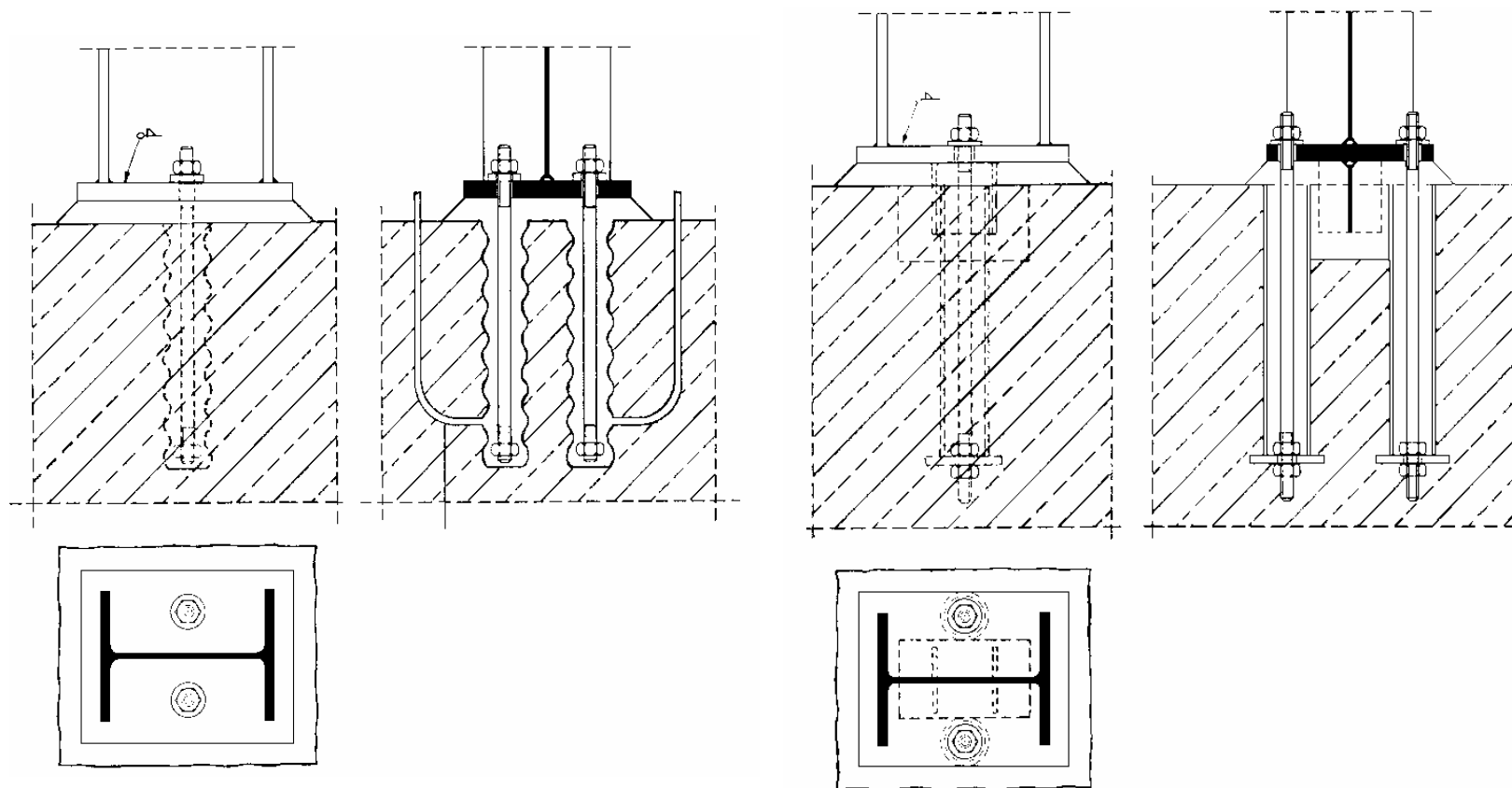
# Oszlopok lehorgonyozása I.



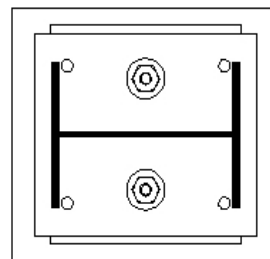
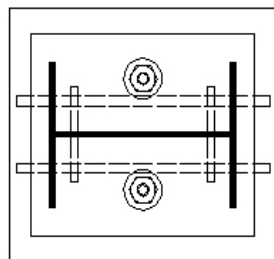
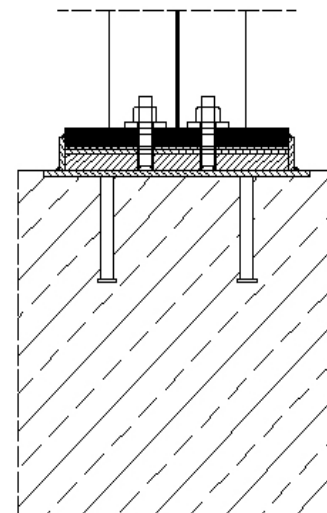
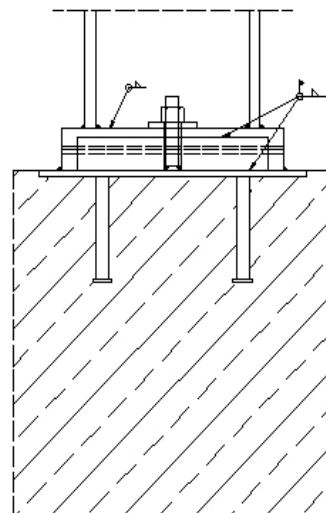
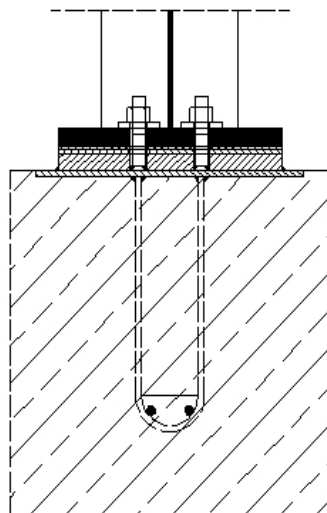
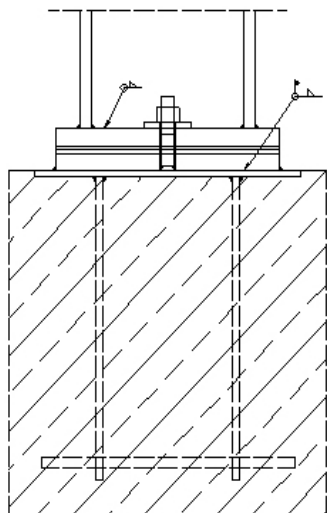
# Oszlopok lehorgonyozása II.



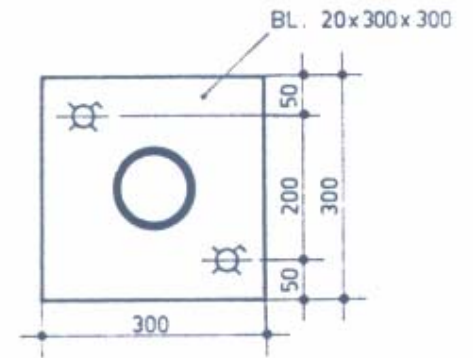
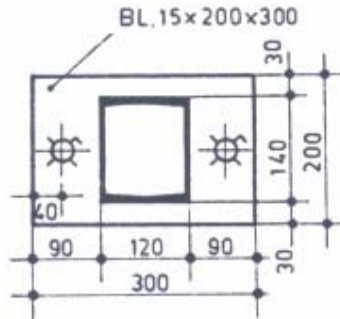
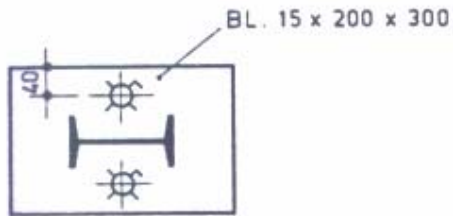
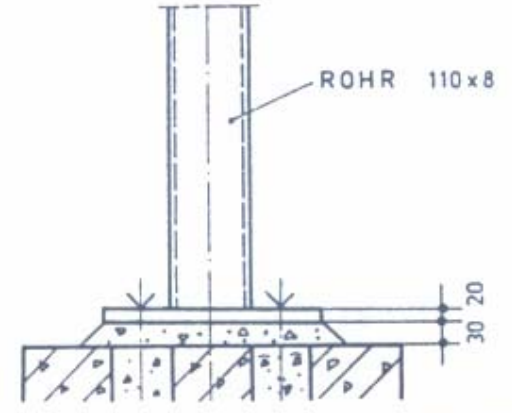
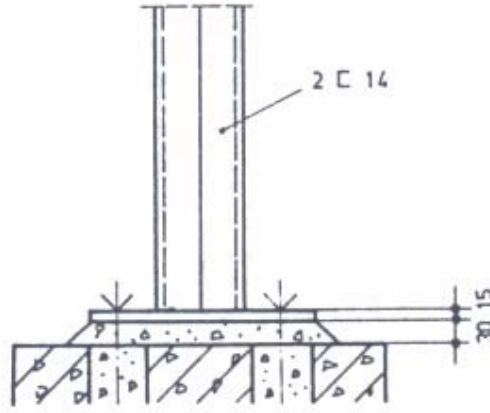
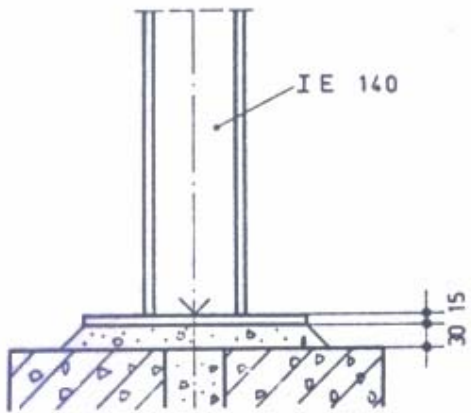
# Oszlopok lehorgonyyzása III.

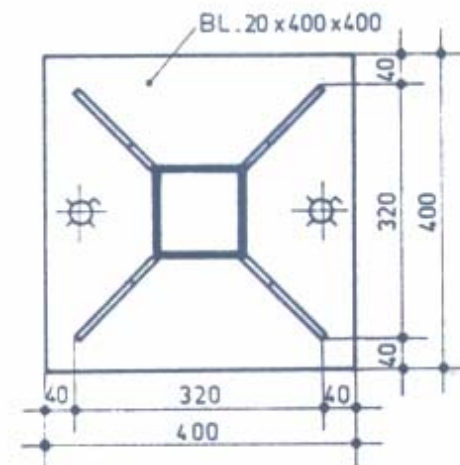
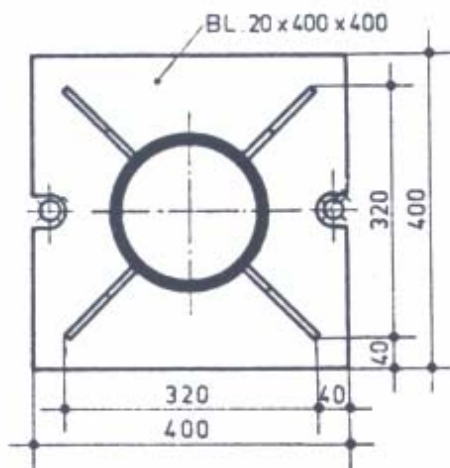
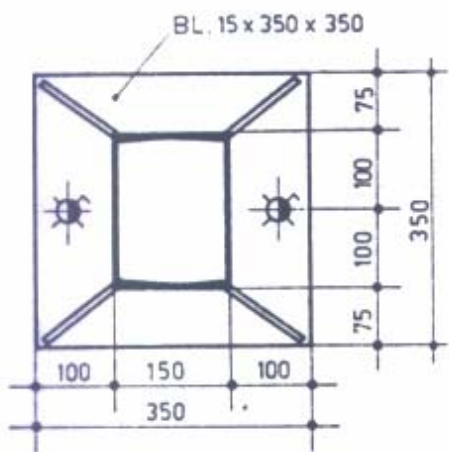
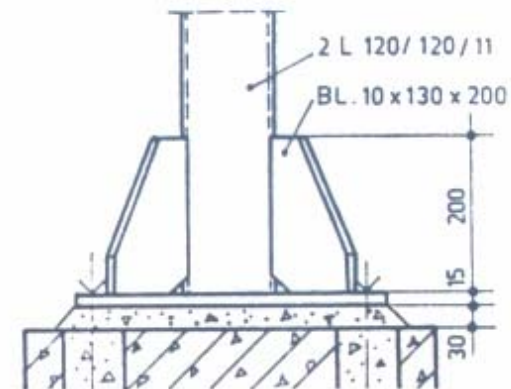
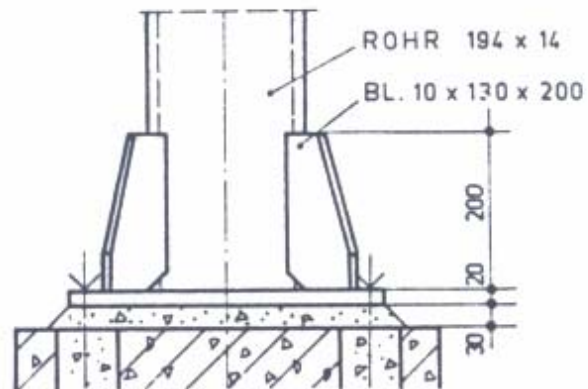
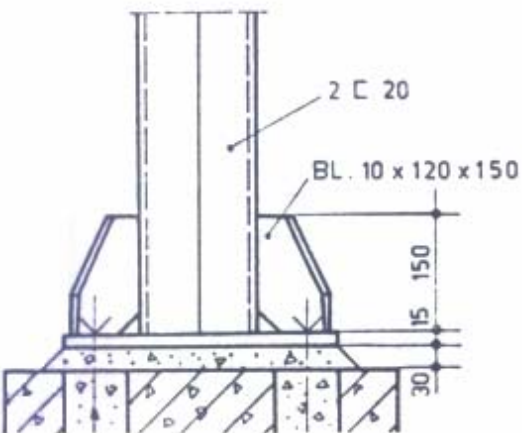


# Oszlopok lehorgonyozása IV.



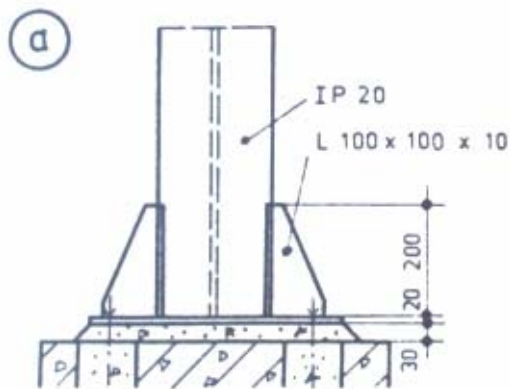
# Oszloptalp kialakítások I.



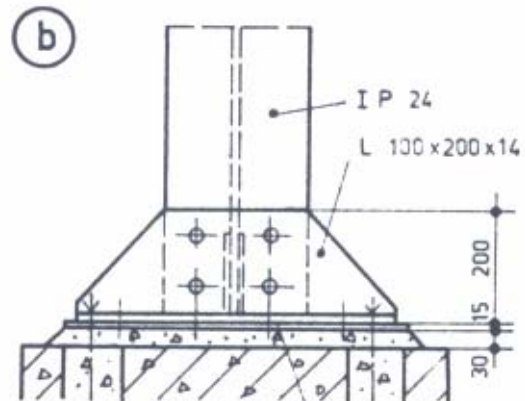
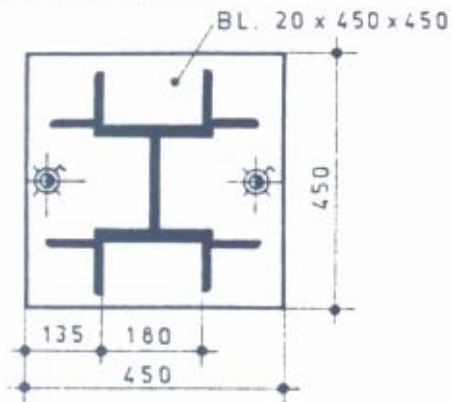




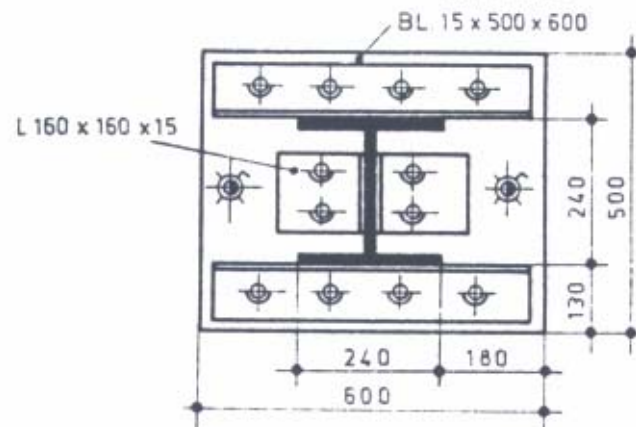
# Oszloptalp kialakítások II.

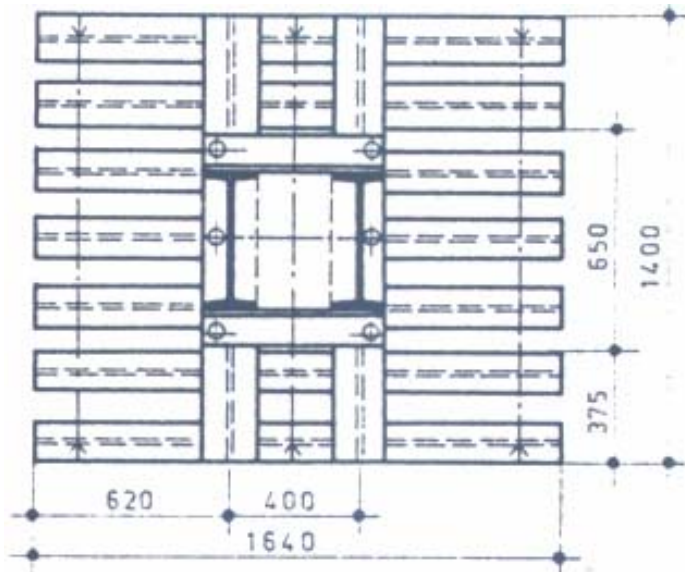
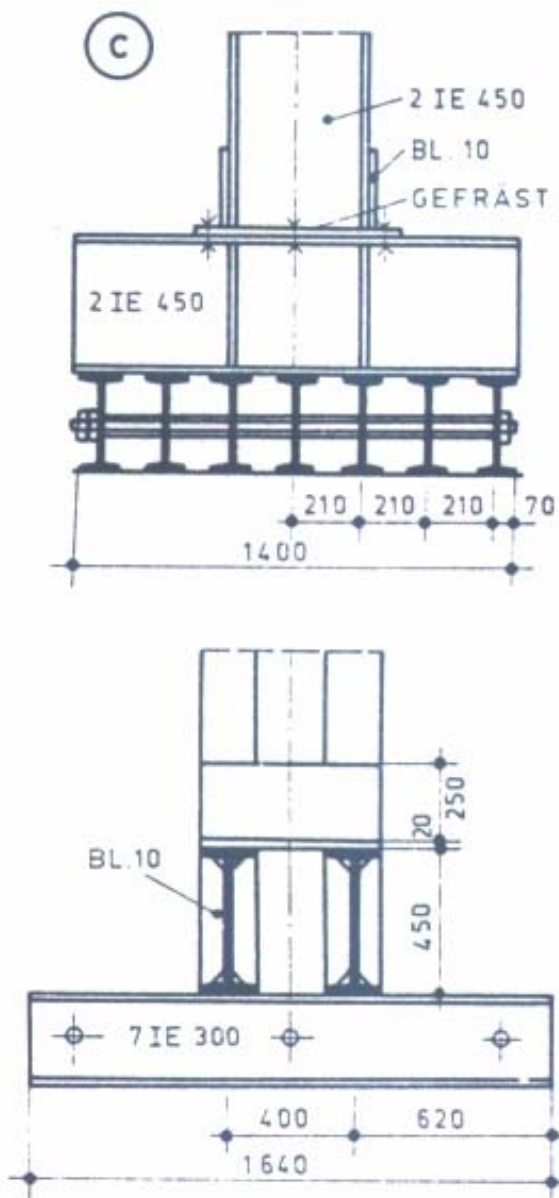


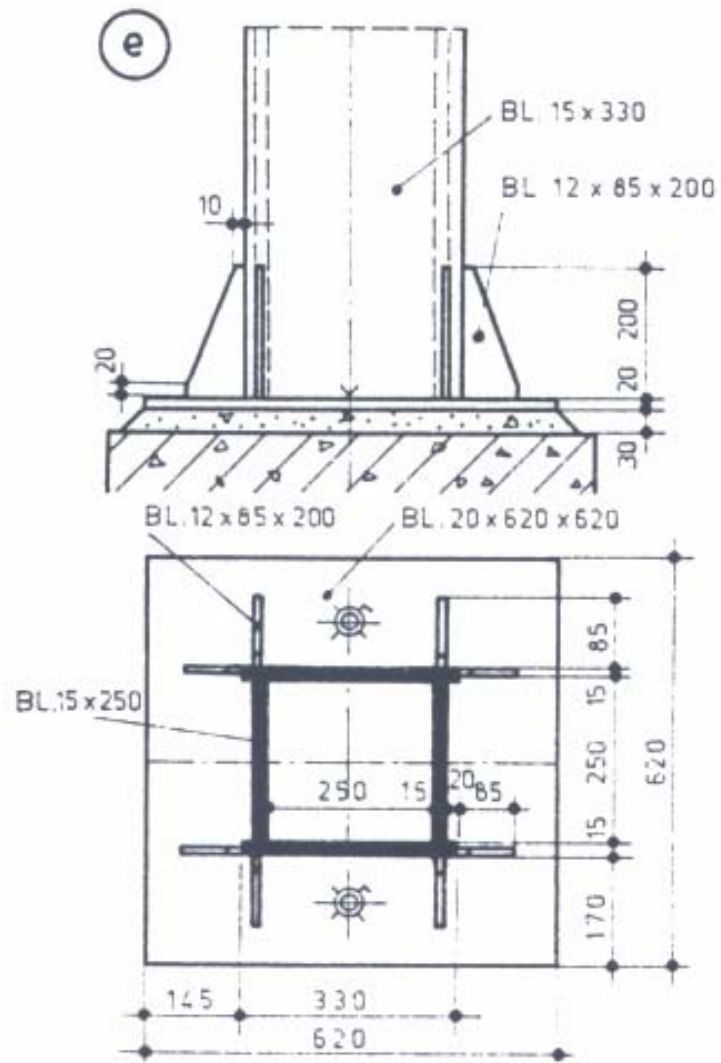
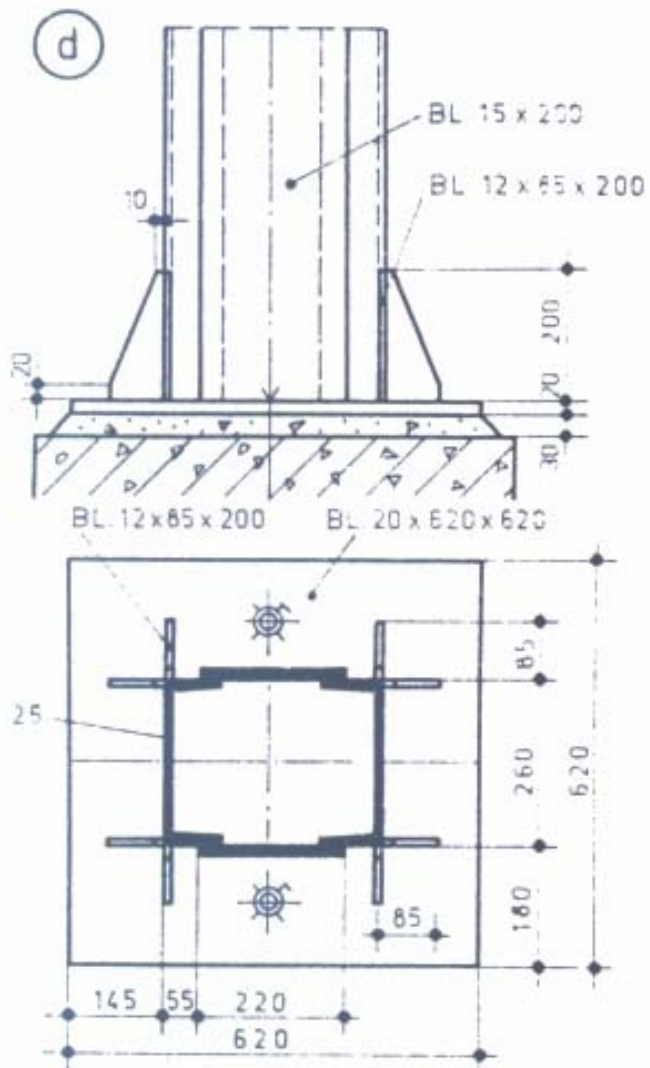
STEINSCHRAUBE



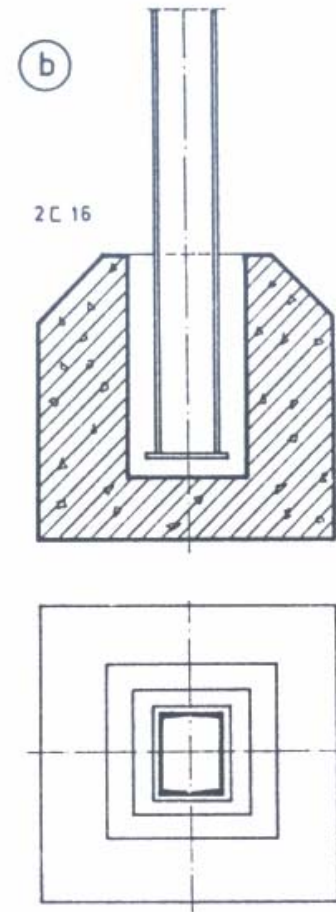
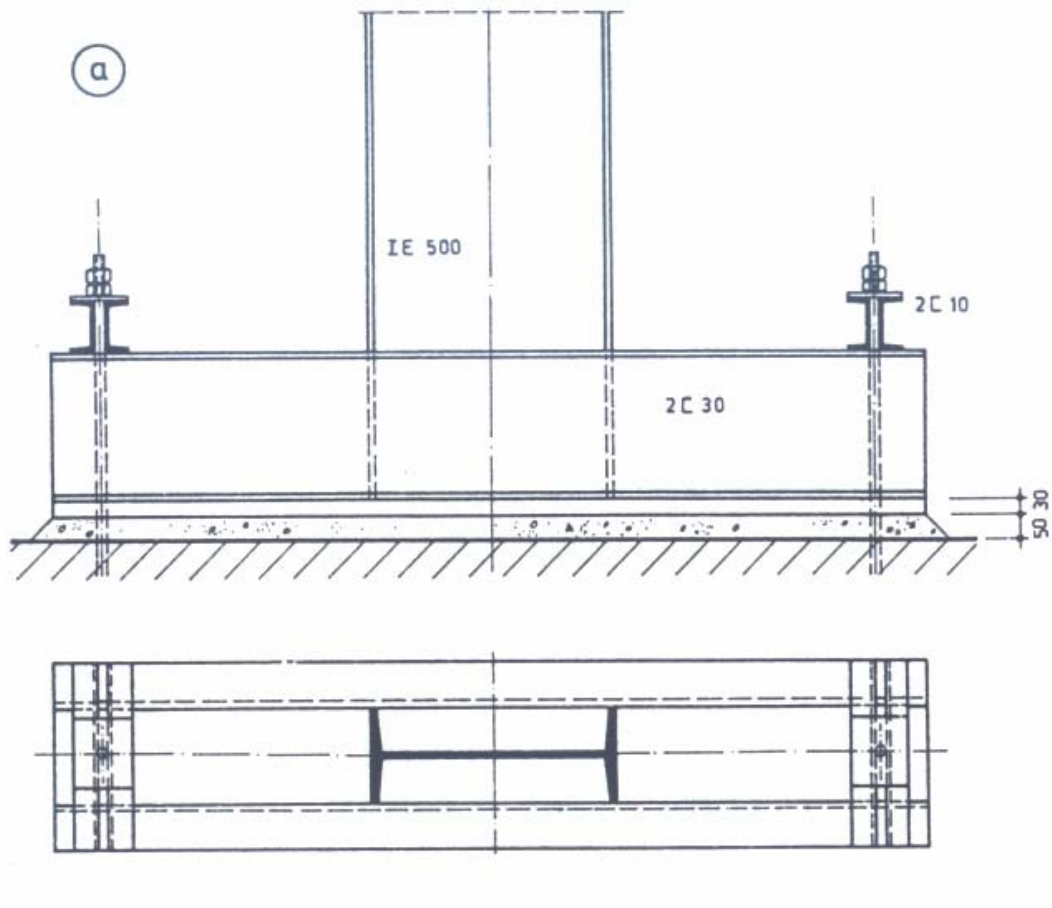
GEFRÄST

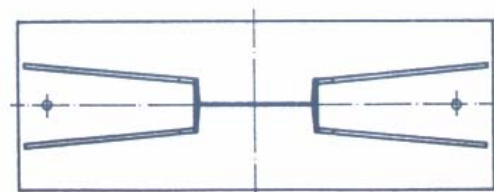
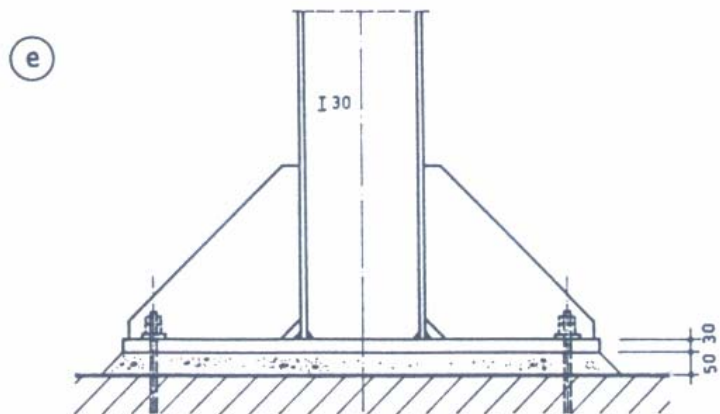
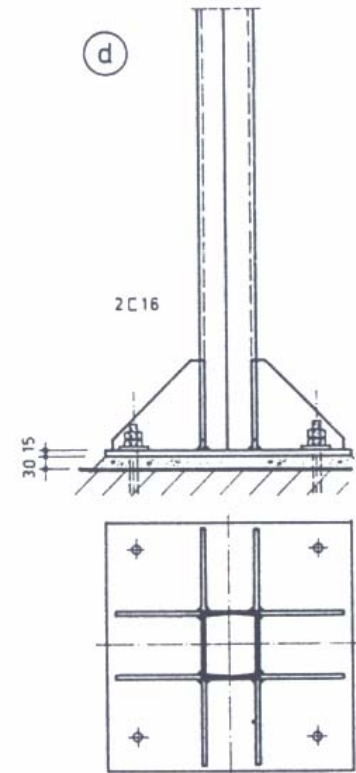
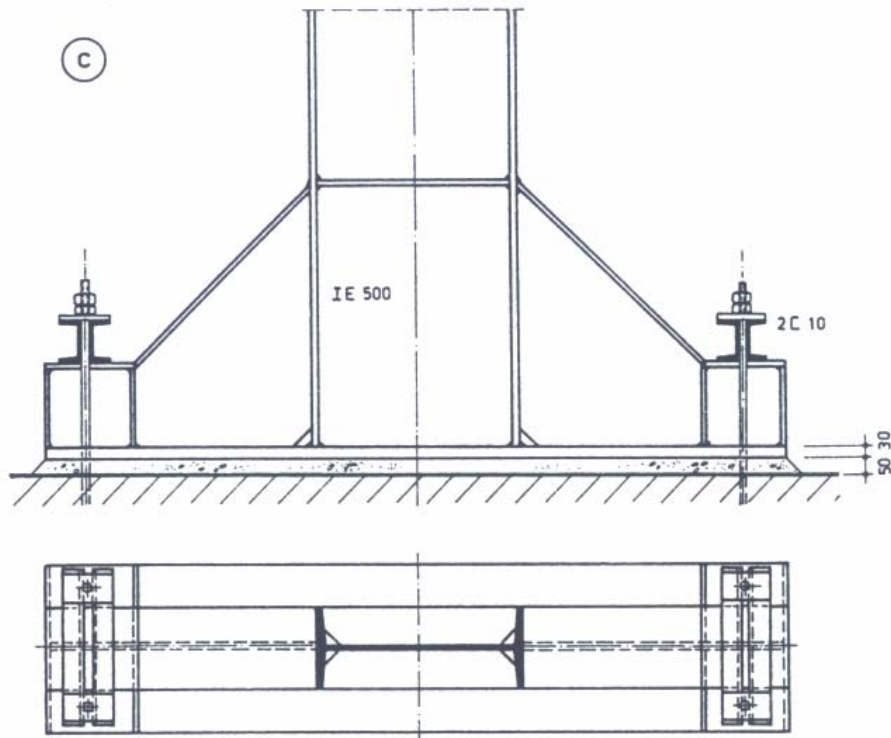






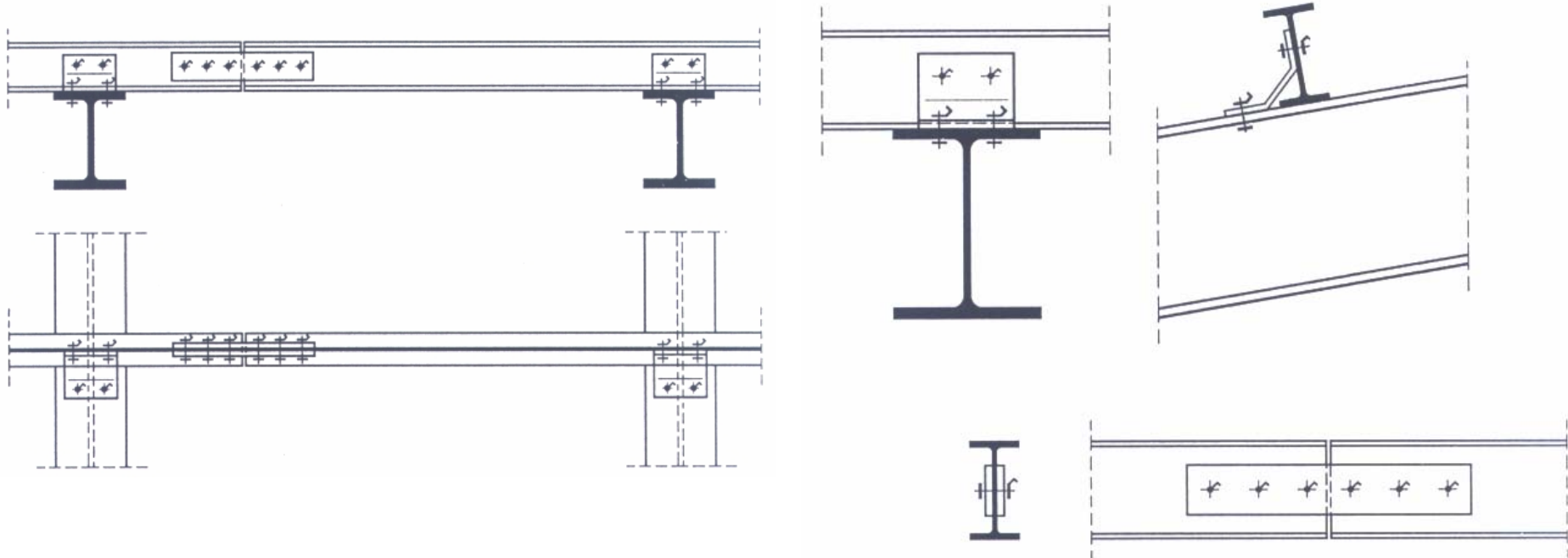
# Talpgerendás oszloptalp



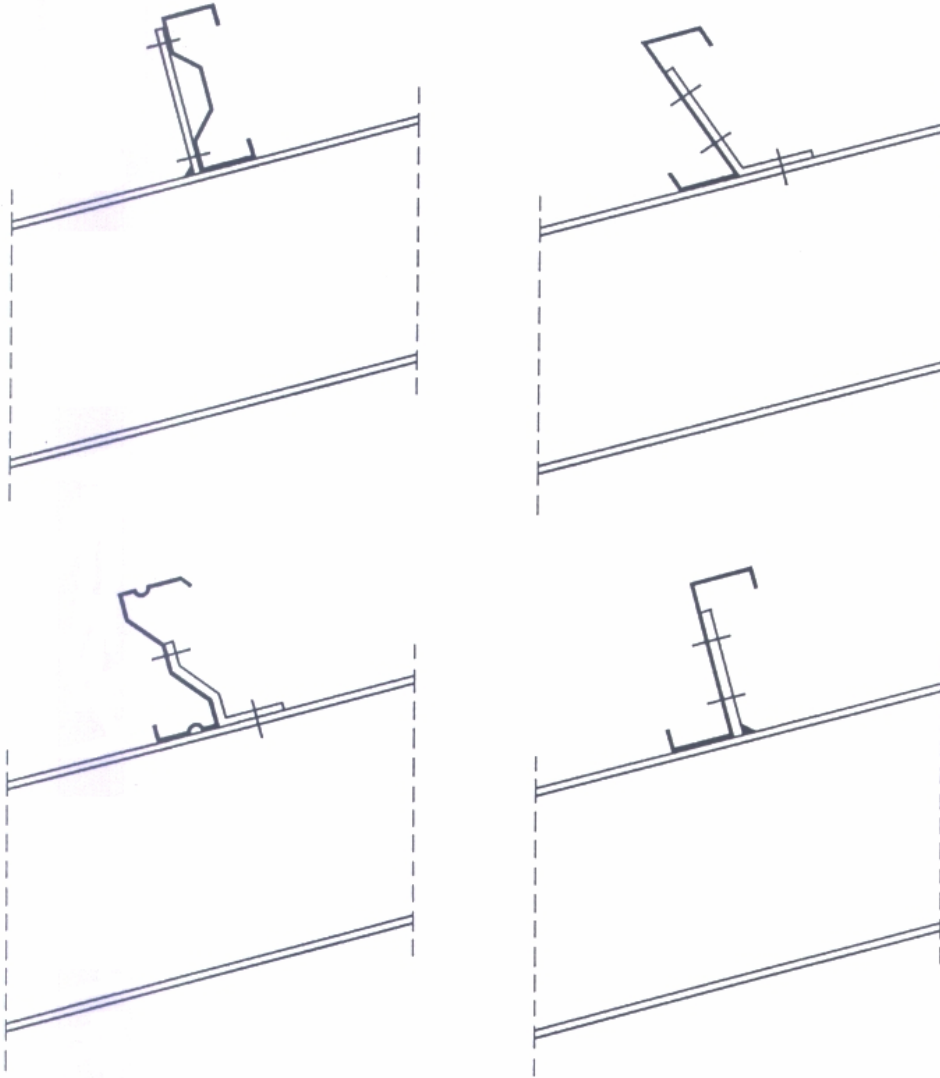


# Szelemenek:

## (A) Hengerelt szelvények

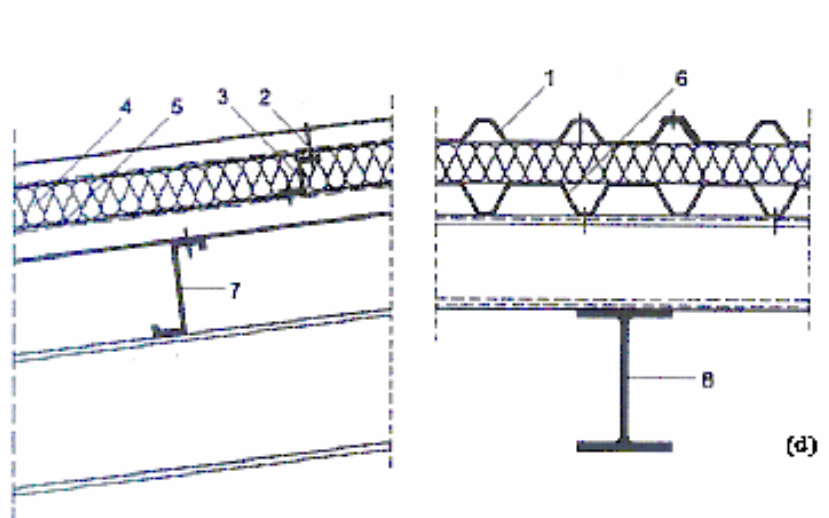
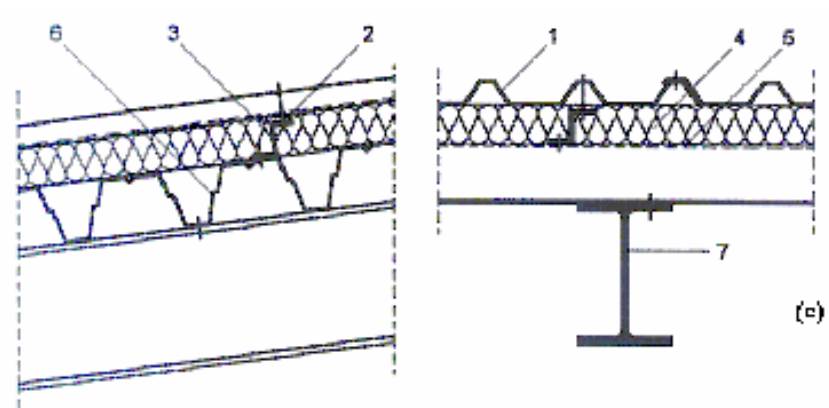
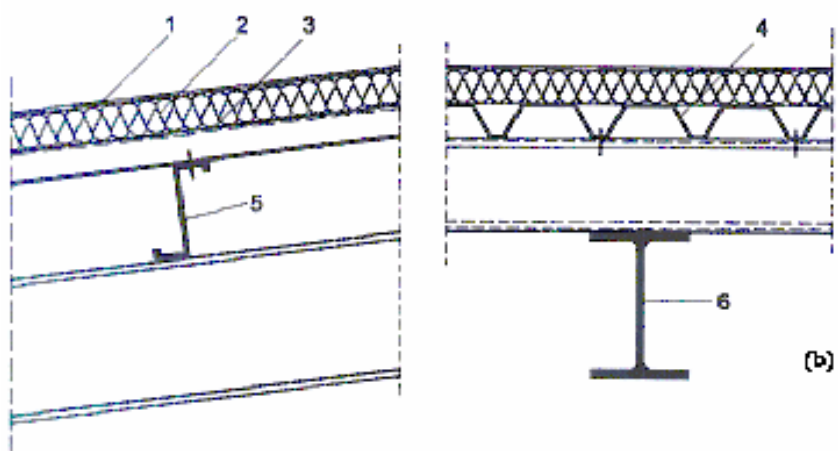
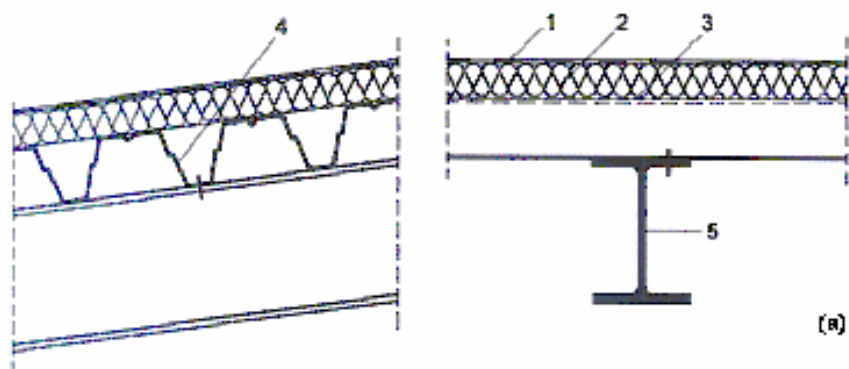


## (B) Hidegen alakított szelvények



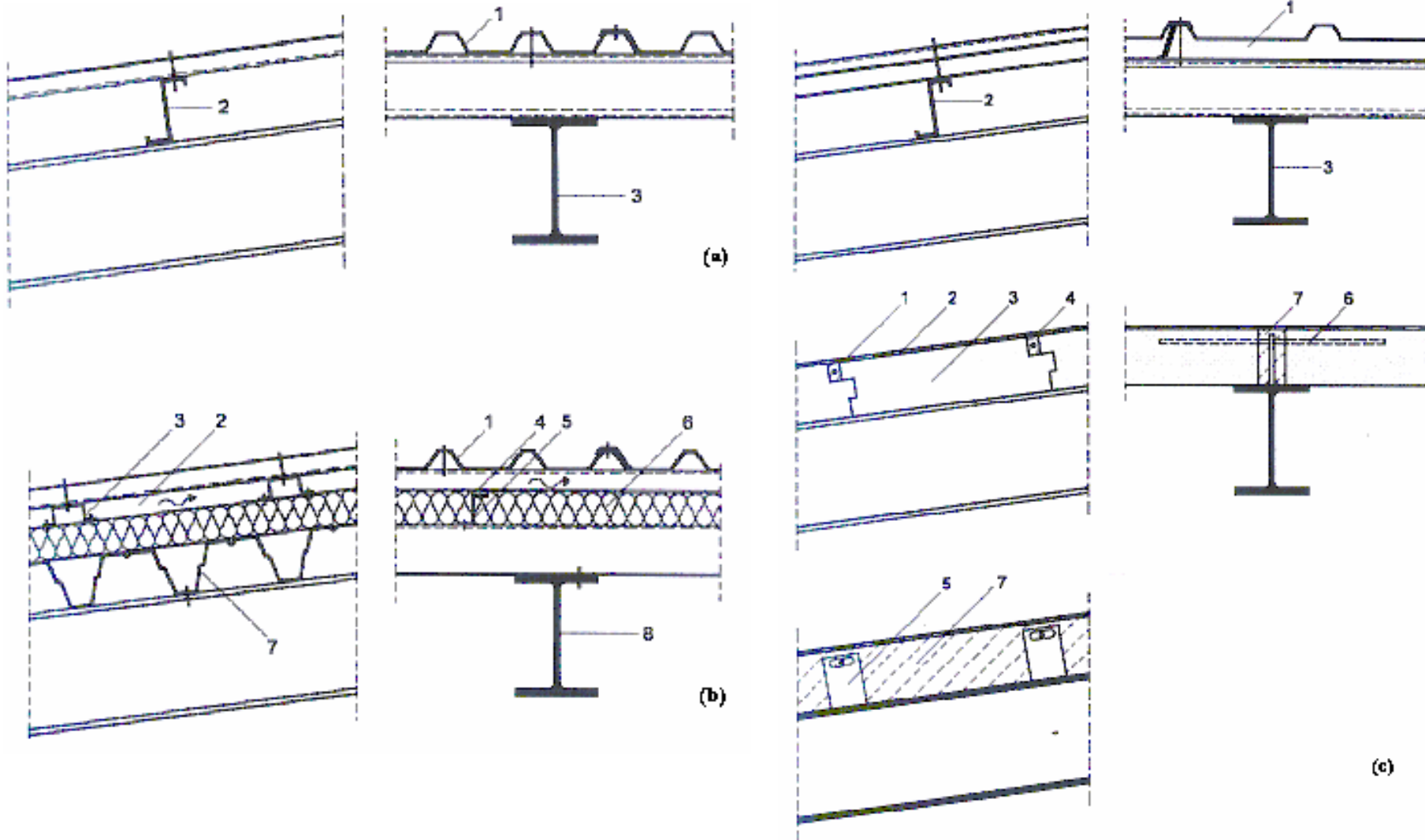


# Hőszigetelt tetőhéjalás

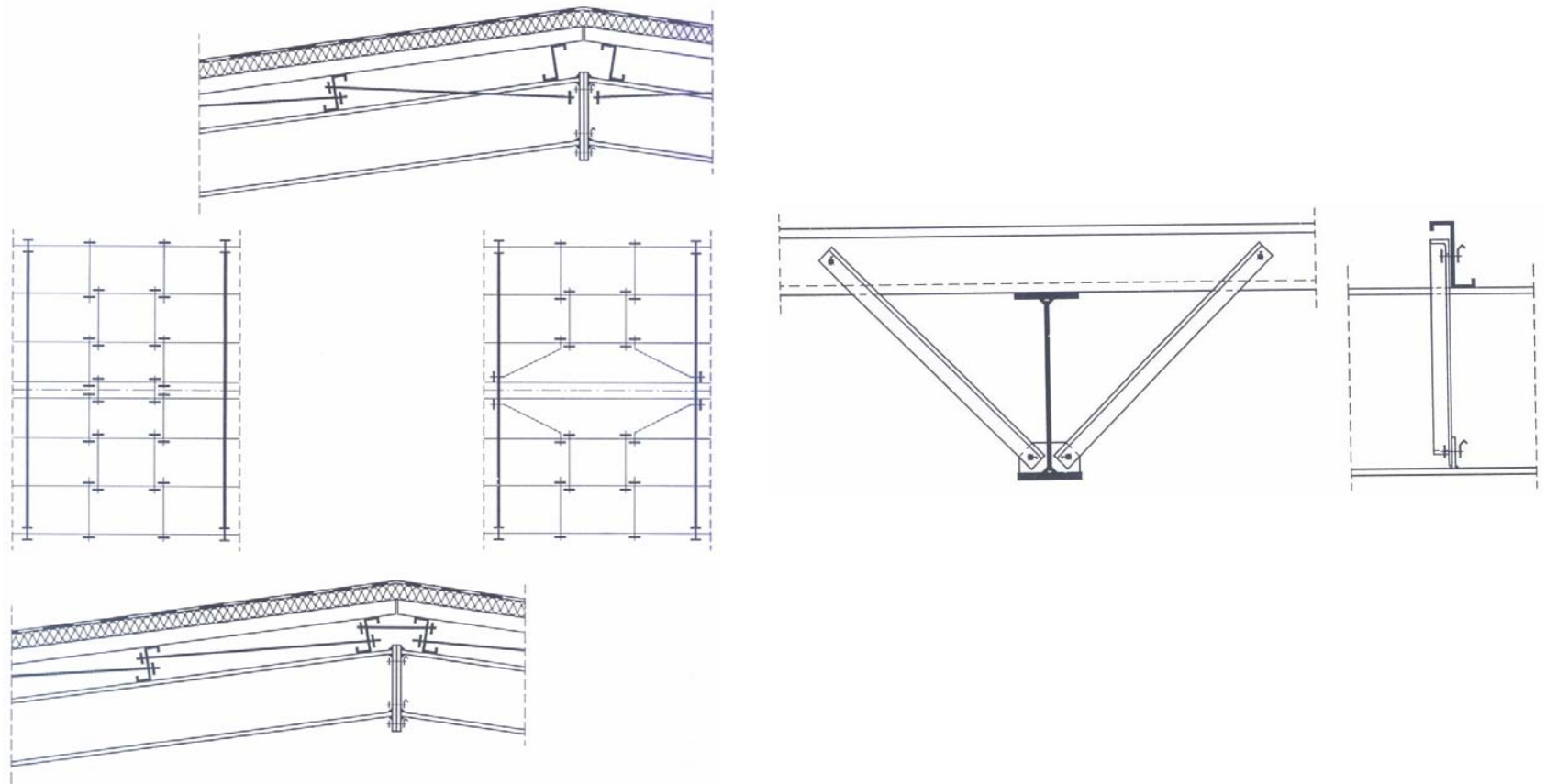




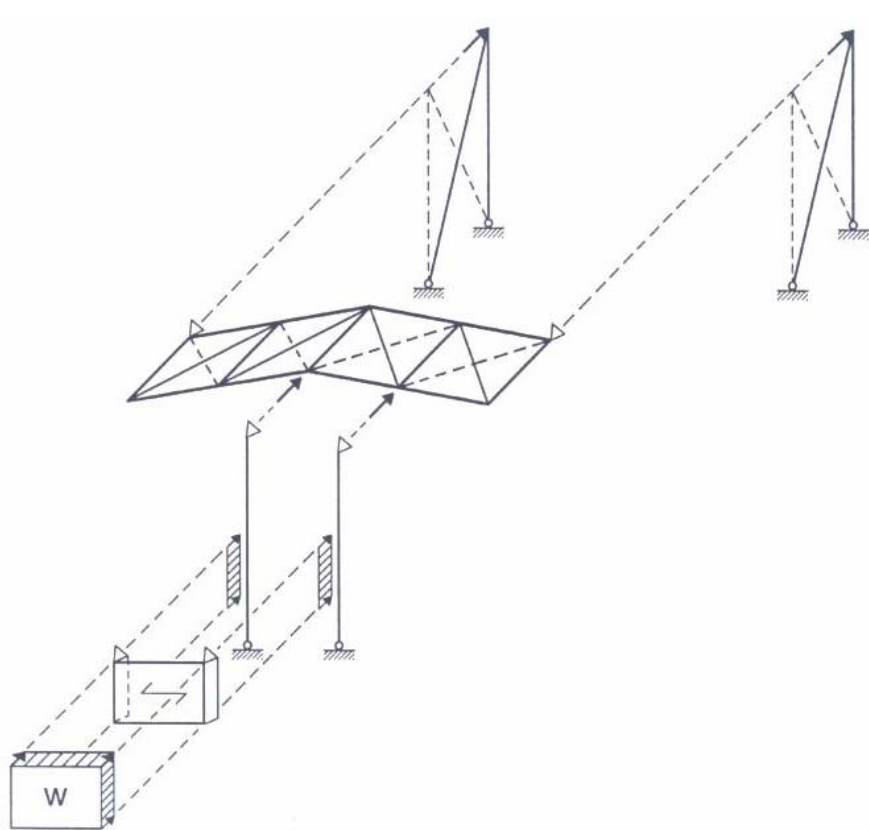
# Hőszigetelés nélküli tetőhéjazatok



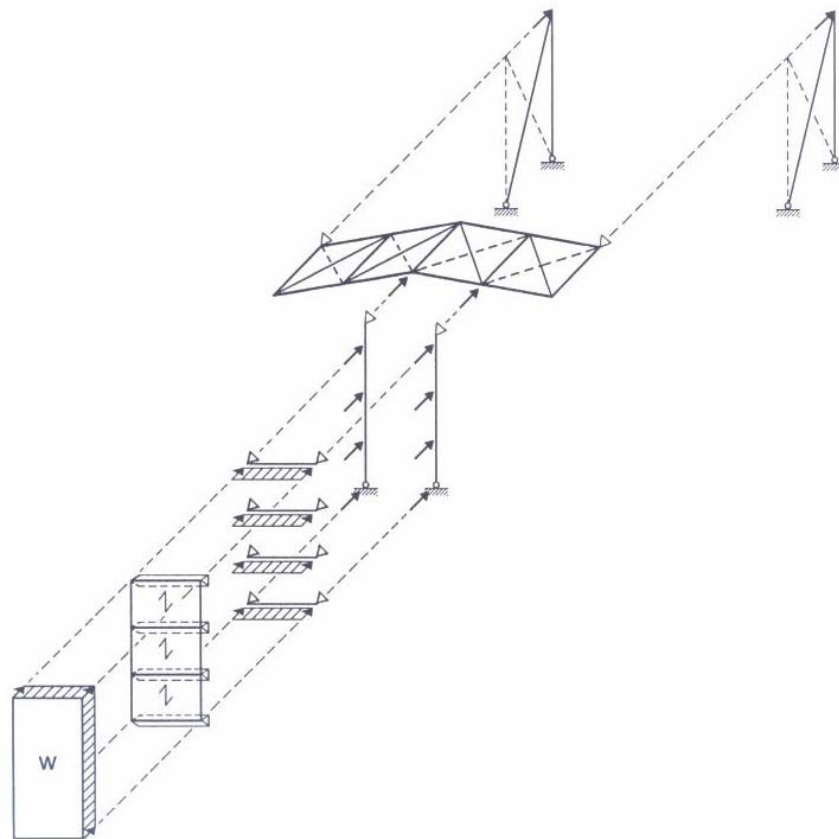
## Szelemenek megtámasztása a tető síkjában



## Szélrács és hosszmerevítés

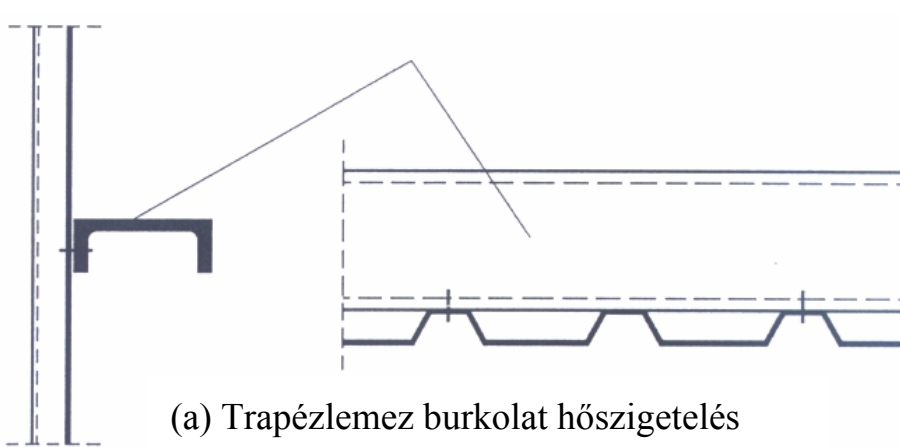


(a) Vízszintes falvázgerenda nélküli eset

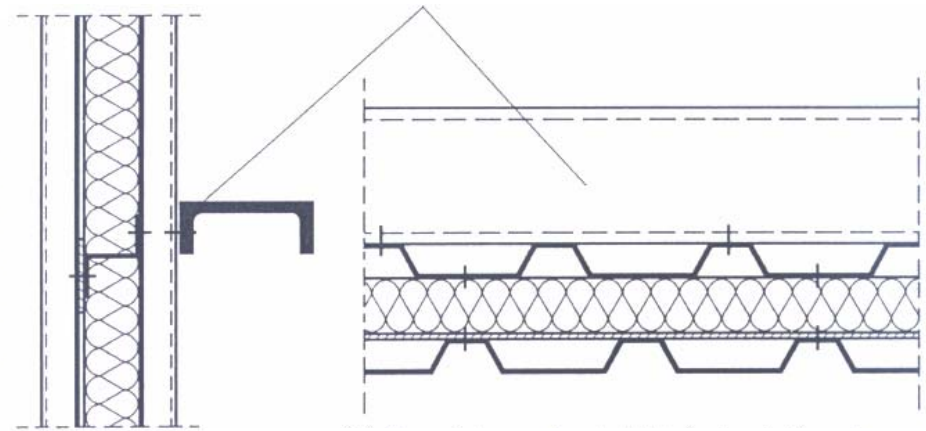


(b) Vízszintes falvázgerendával kialakított eset

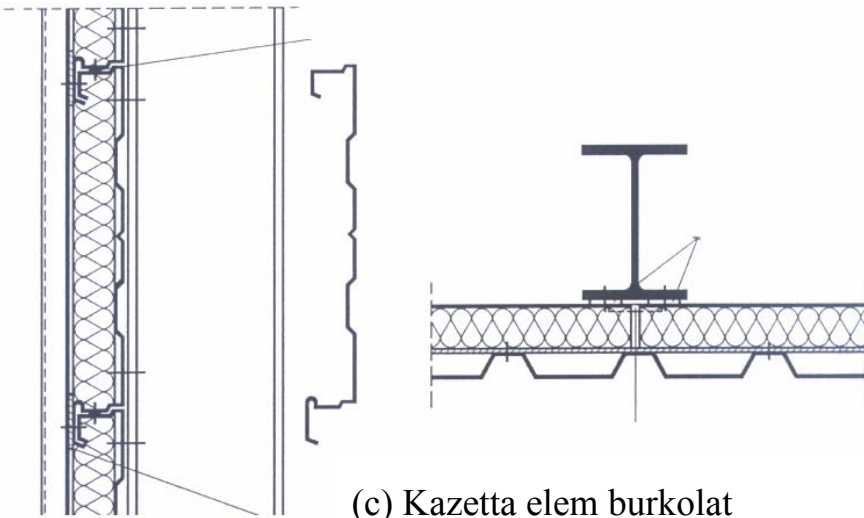
# Oldalfal burkolatok:



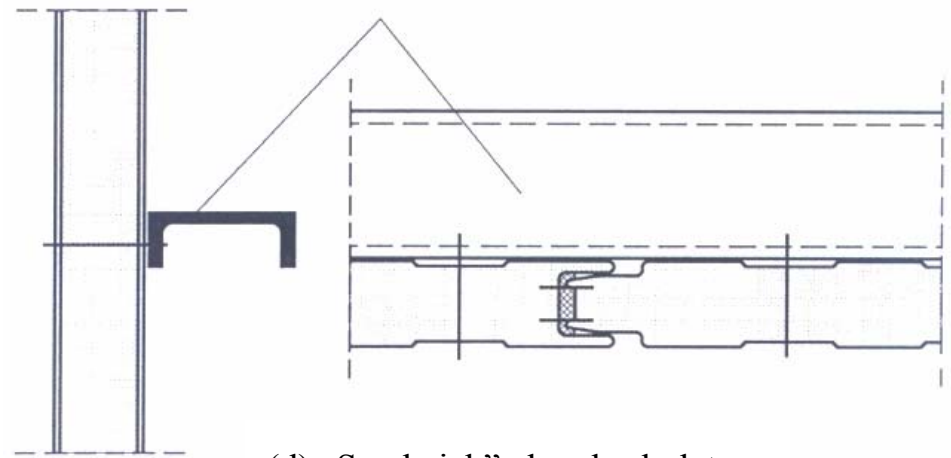
(a) Trapézlemez burkolat hőszigetelés nélkül



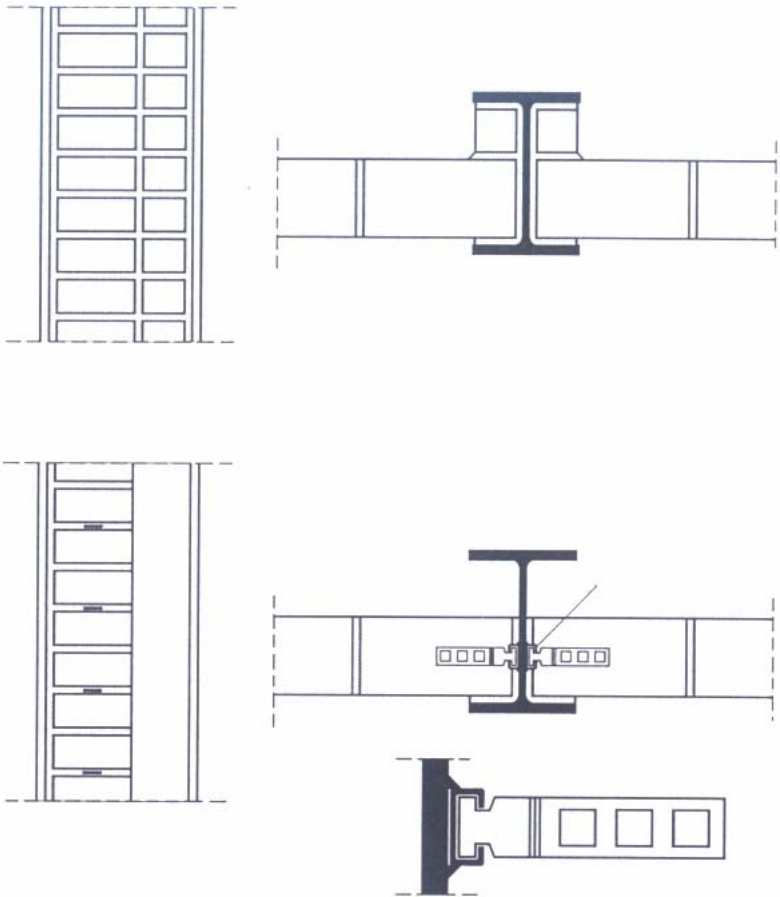
(b) Trapézlemez burkolat hőszigeteléssel



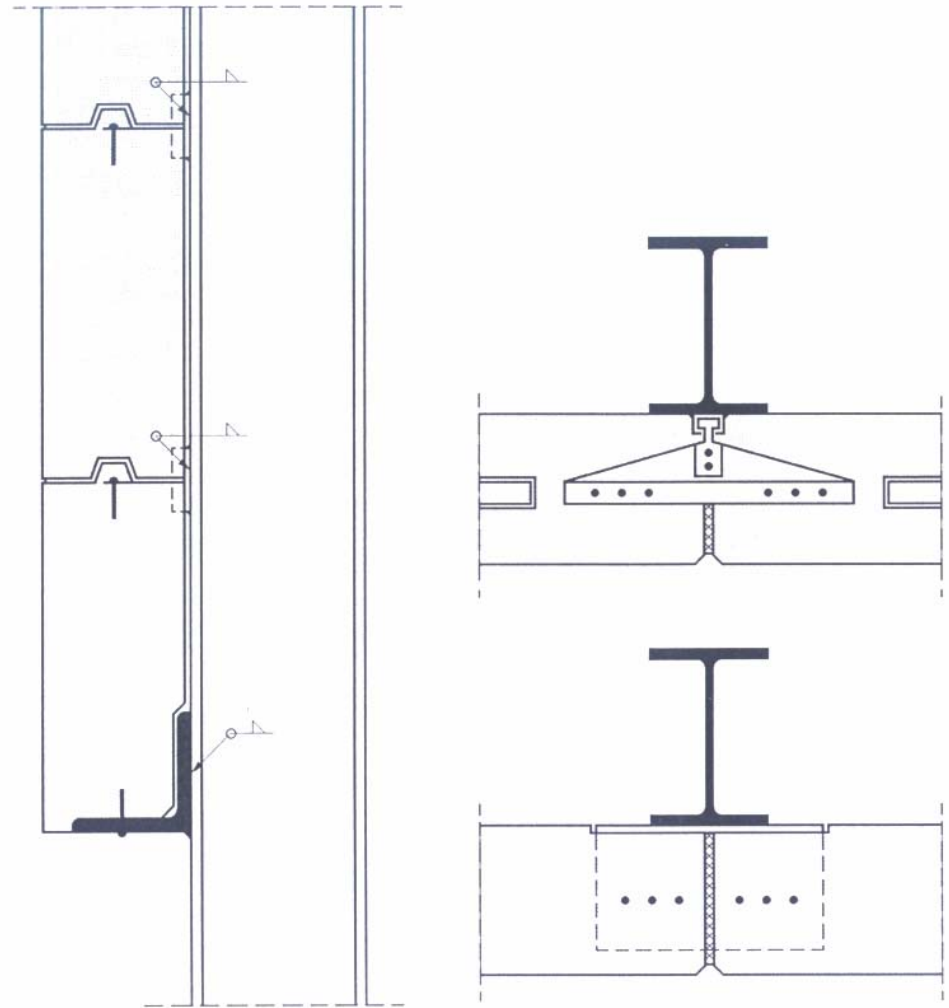
(c) Kazetta elem burkolat



(d) „Sandwich” elem burkolat



(a) Téglafal kapcsolata az acélszerkezettel

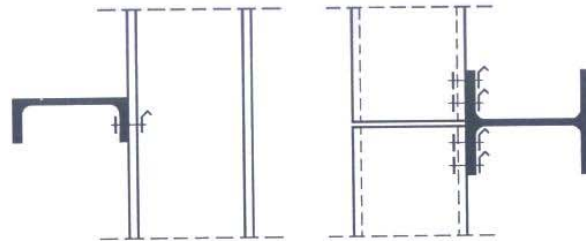


(b) Könnyű betonelemek kapcsolata az acélszerkezettel

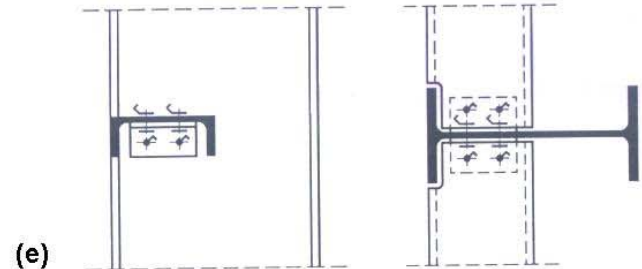
## Falvázgerendák kapcsolata a főtartóhoz:

Falváz gerendák a főtartó külső oldalán

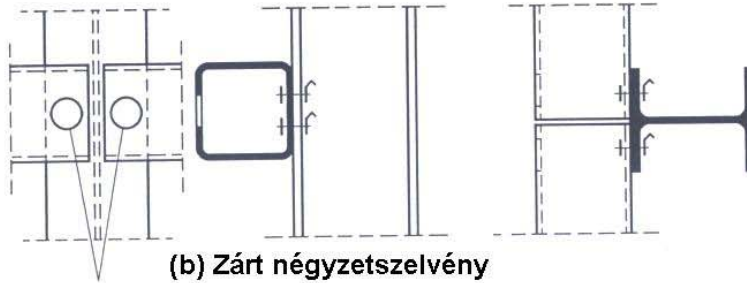
Falvázgerendák a főtartó belső oldalán



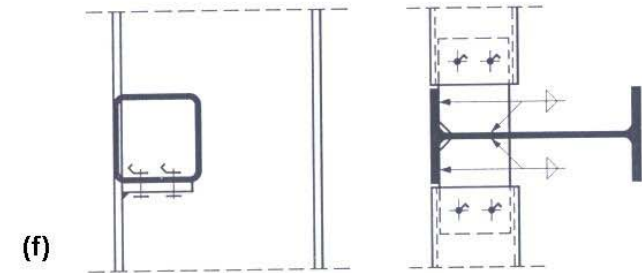
(a) Hengerelt u szelvény



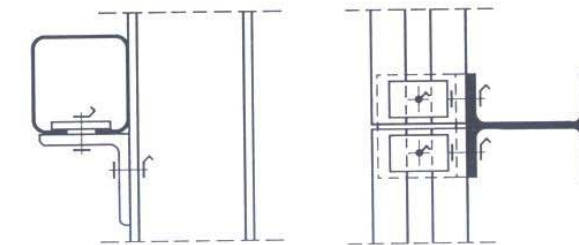
(e)



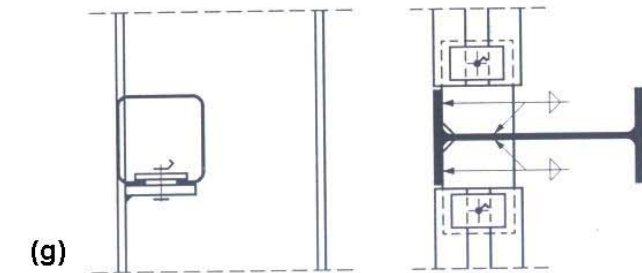
(b) Zárt négyzetszelvény



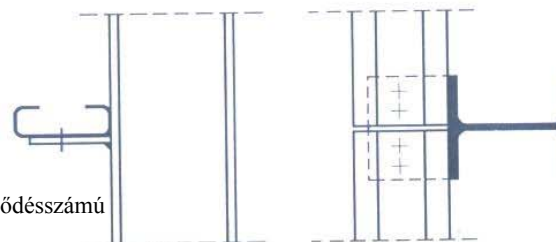
(f)



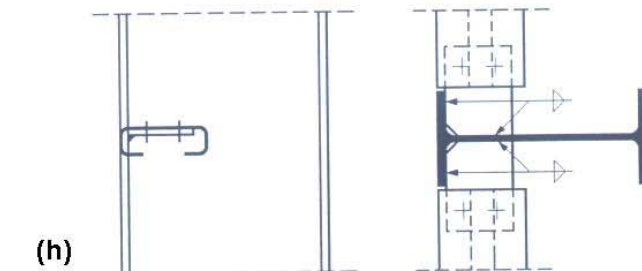
(c) C szelvény



(g)

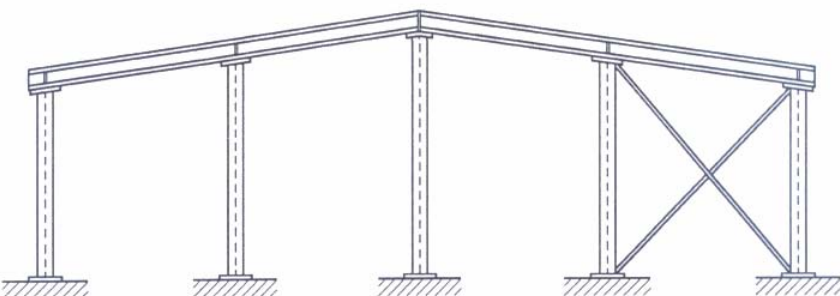
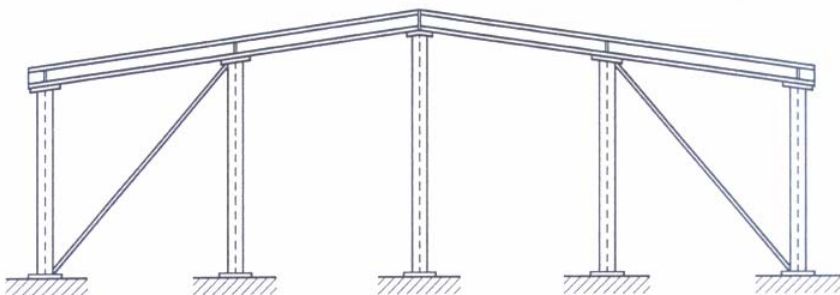
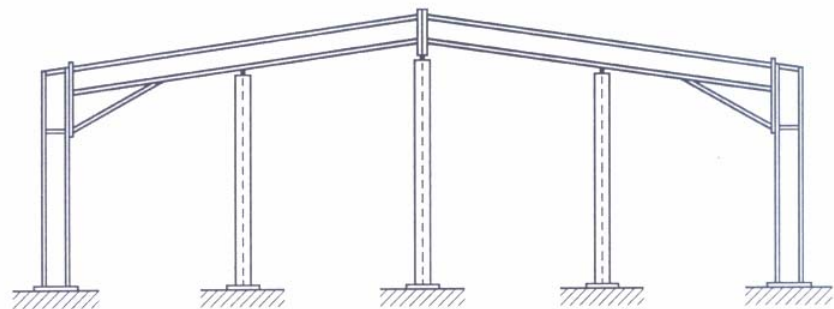


(d) C szelvény



(h)

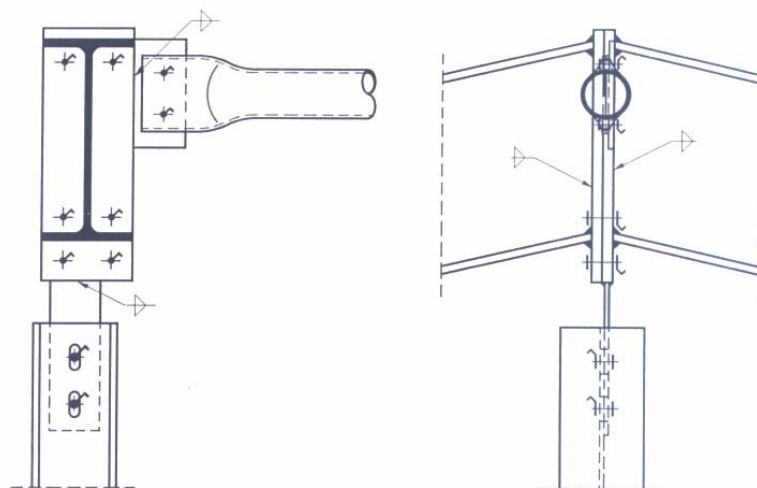
## Homlokfal szerkezeti kialakítása:



(a)

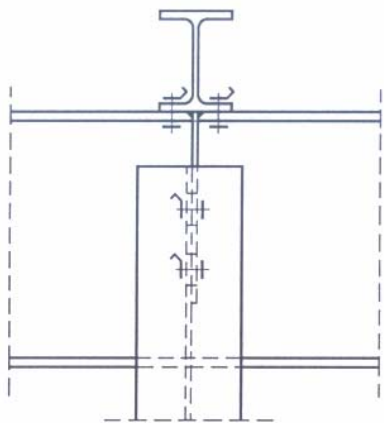
Készült az ERFP-DD2002-HU-B-01 szerződésszámú projekt támogatásával

## Homlokfal oszlop és keret taréjpont csatlakozása:

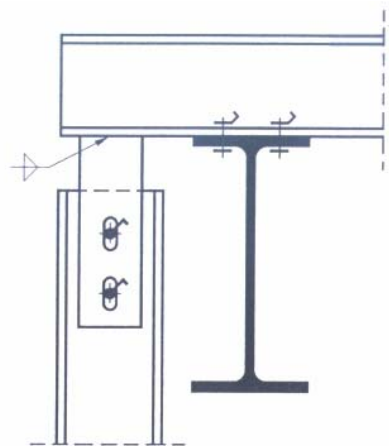


(b)

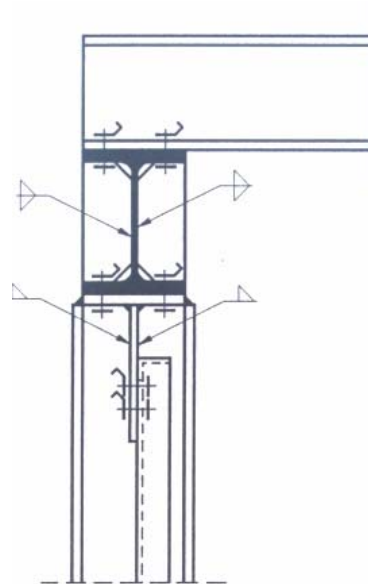




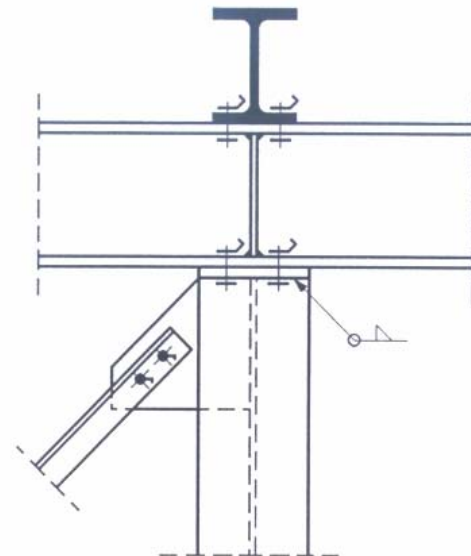
(a) Homlokfal oszlop és szelemen csatlakozása



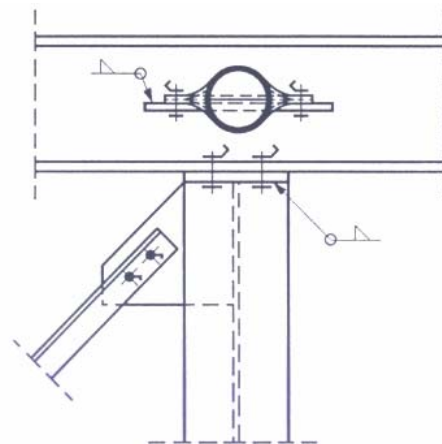
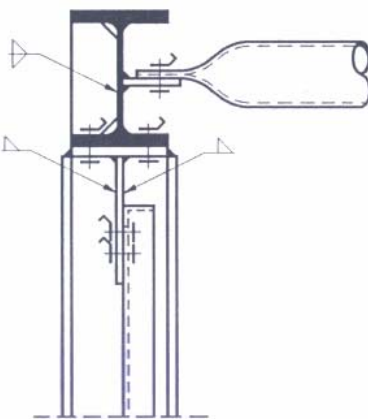
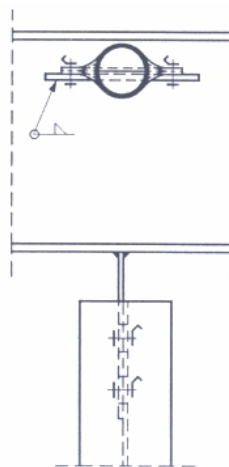
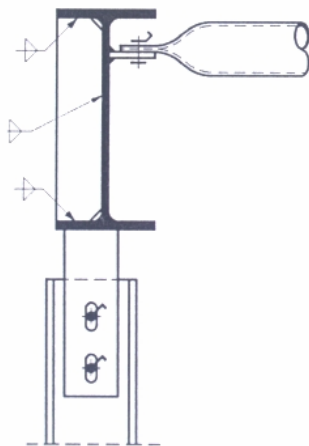
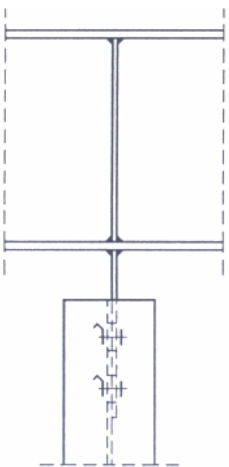
(b) Homlokfal oszlop és keretgerenda csatlakozása



(c) Homlokfal csatlakozások

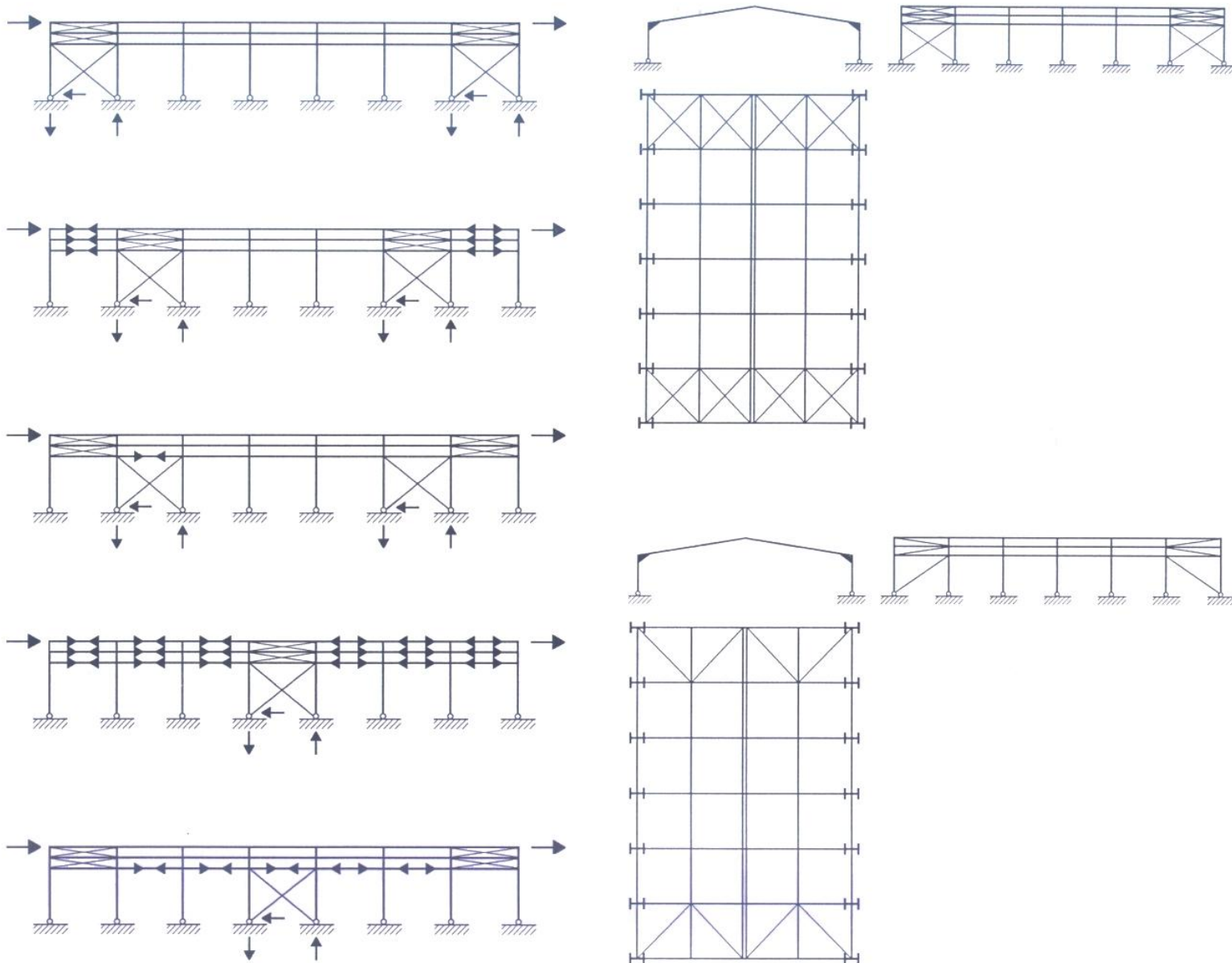


(d) Oldalfal csatlakozások

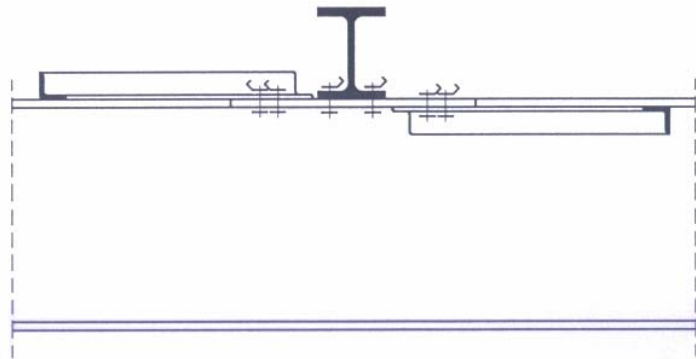
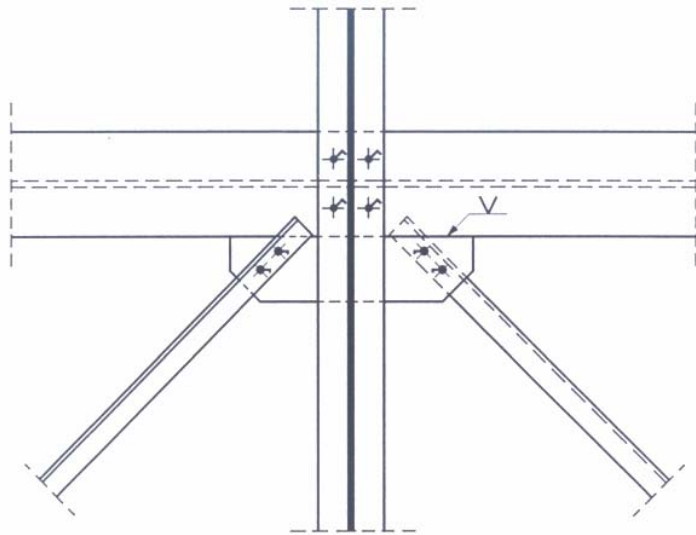




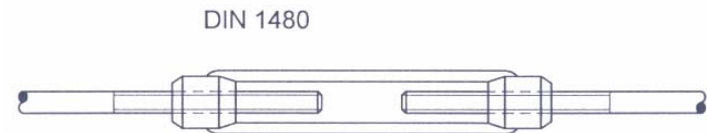
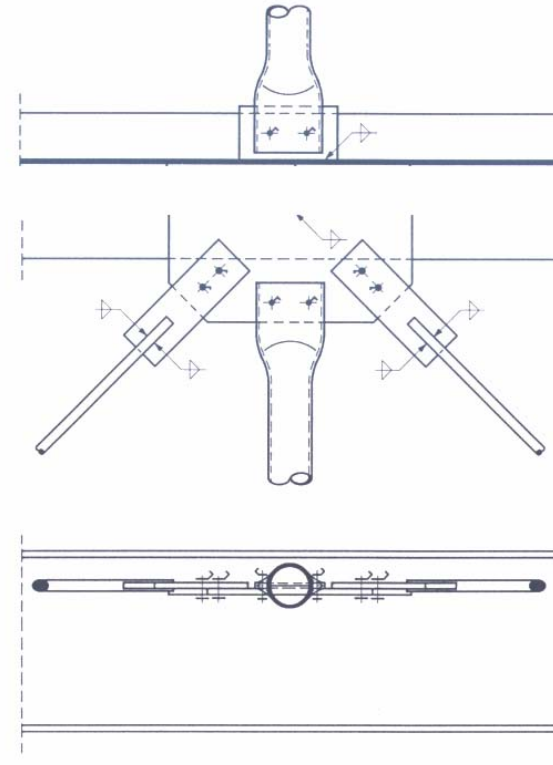
## Merevítőrendszerek és erőhatások



# Szélrácsok szerkezeti kialakítása

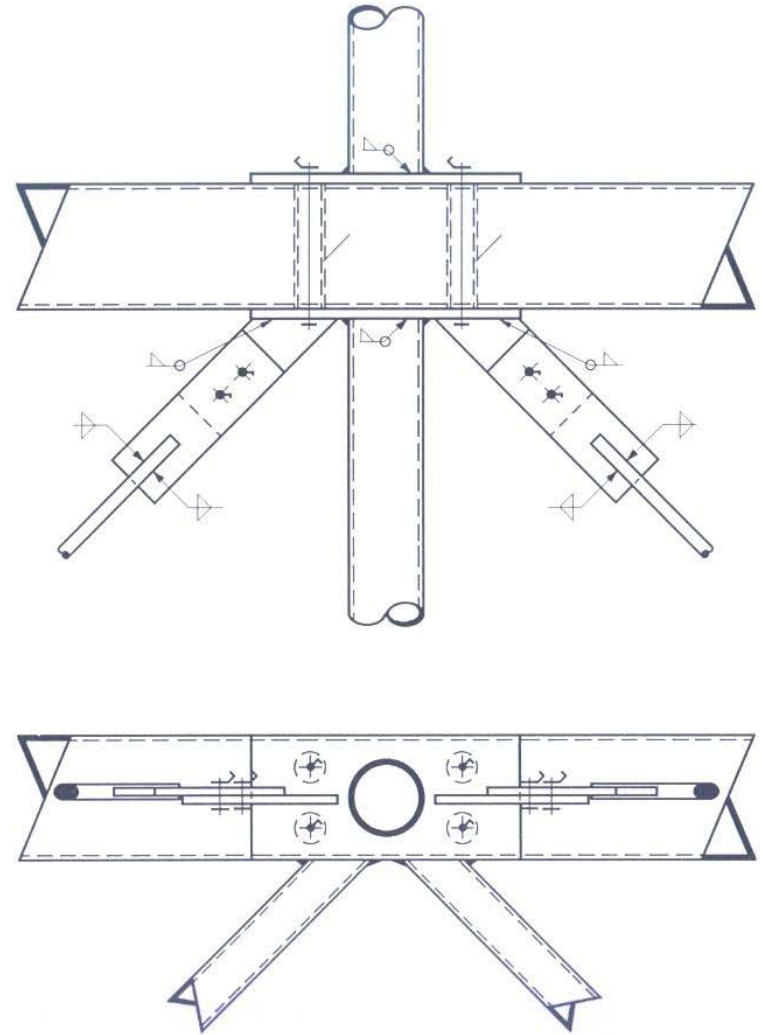
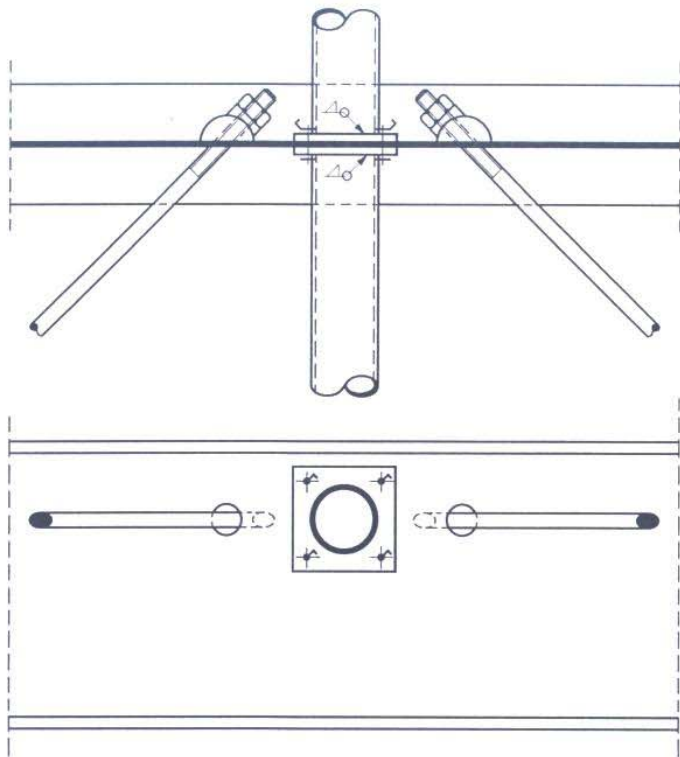


(a) Hengerelt szögacél szélrács

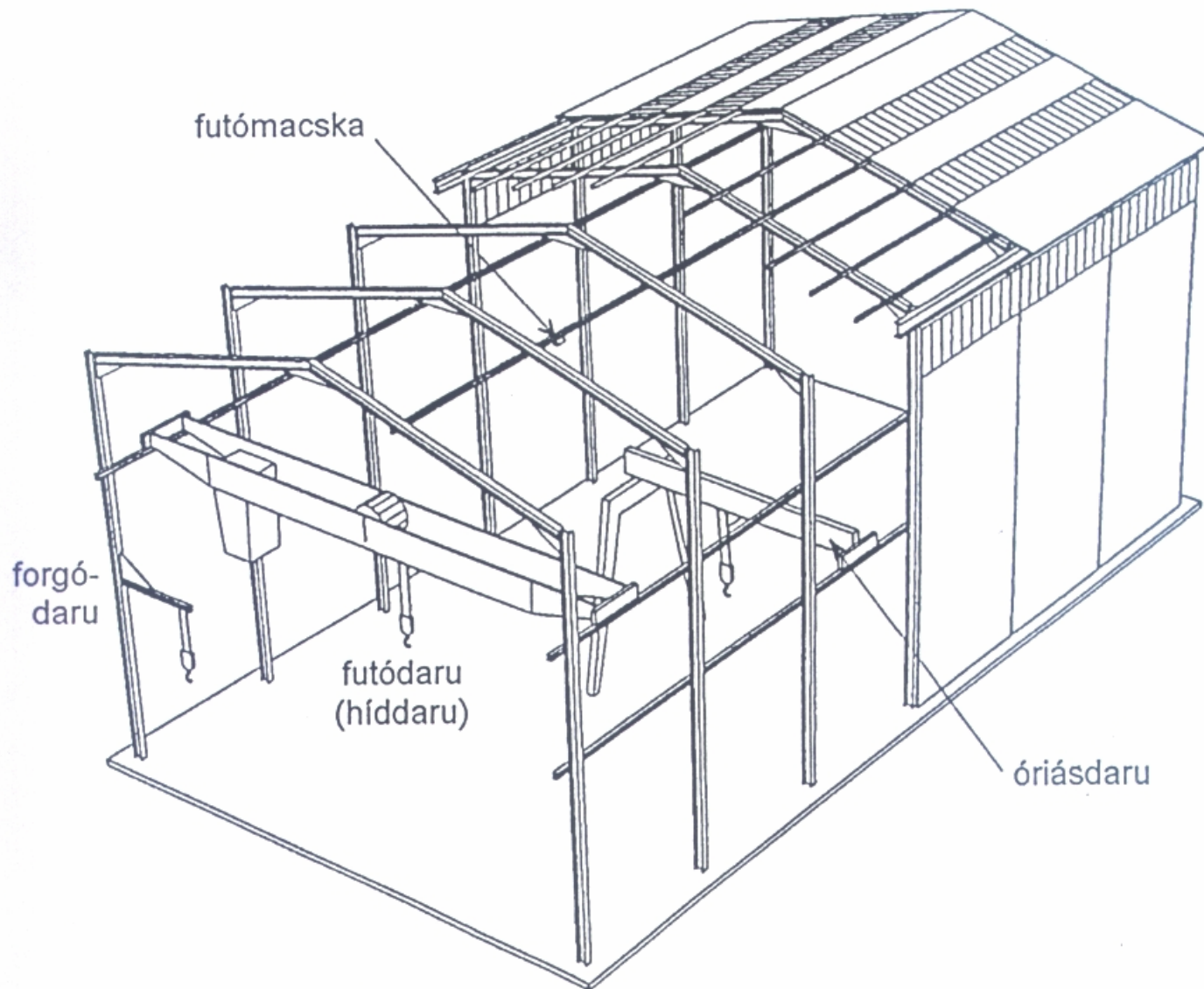


(b) Cső- és körkeresztmetszetű rudak szélrács kialakításnál

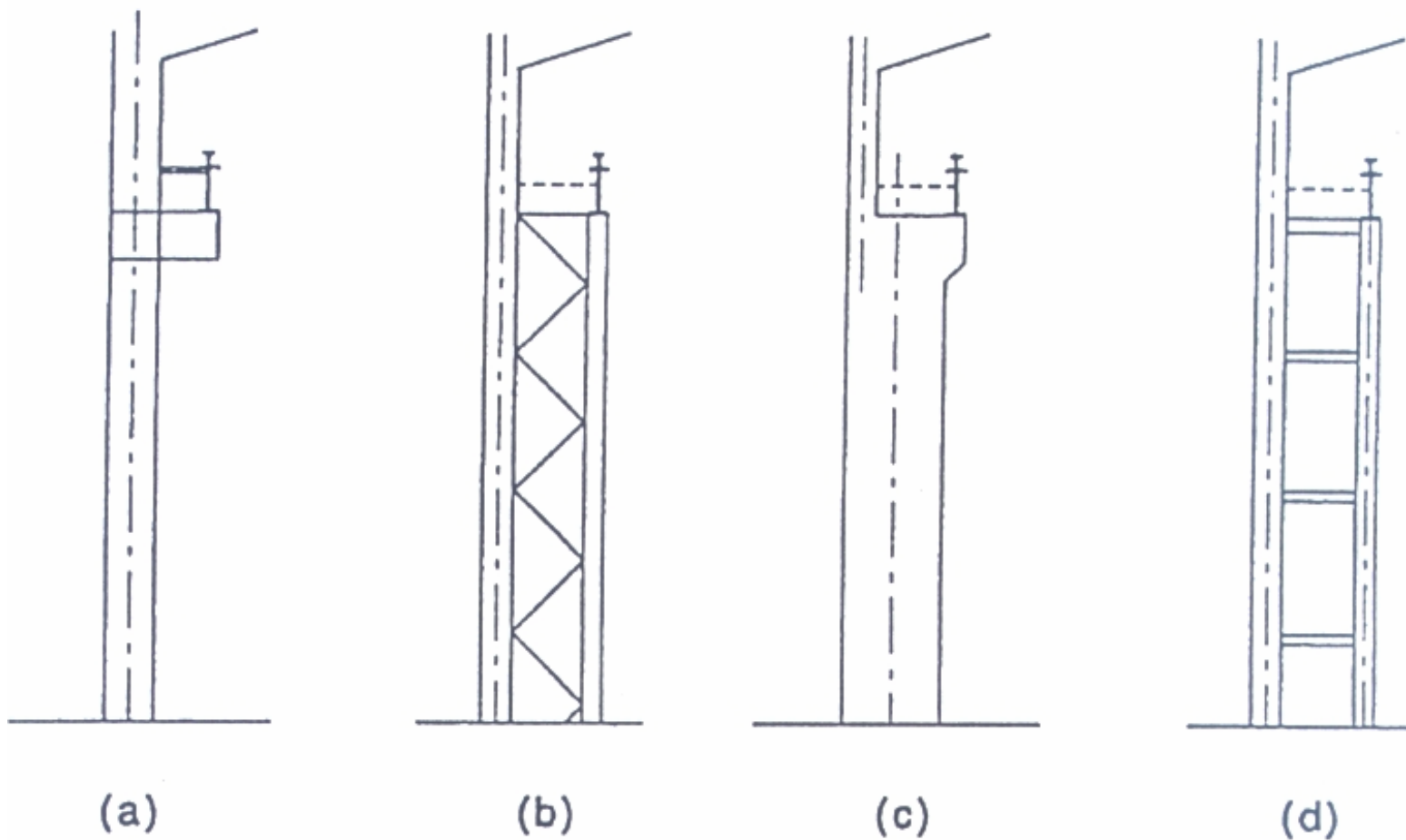
# Szélrácsok szerkezeti kialakításai: Cső- és kör keresztmetszetű rudak szélrács kialakításánál



## Különböző típusú daruk keretszerkezetű csarnokban



## A darupályatartó és a szerkezet



*Darupályát alátámasztó oszlopok (a) viszonylag könnyű darukhoz;  
(b)–(d) nehéz darukhoz*

## Daruféleségek és daruosztályok

