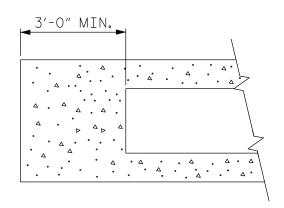


SHEAR KEY DETAIL



TYP. LONGITUDINAL SECTION

FOR APPROX. MAX. SPAN FOR HL-93, SEE FIGURE 11-3

18" CORED SLAB

AREA: 483.4 in.² 3.3568 ft.²

WEIGHT: $3.3568 \times 150 = 504 \text{ lbs/ft.}$

 $I_{XX} = 16289 \text{ in.}^4$ $I_{YY} = 57817 \text{ in.}^4$

W = 3.00 ft.

J = 36880 in.4

* = 15.00 in.

 $C_{T} = 9.080 \text{ in.}$

H = 18.00 in.

 $C_{\rm R} = 8.920$ in.

D = 10.00 in.

 $S_{T} = 1794 \text{ in.}3$

 $S_{\rm B} = 1826 \text{ in.}3$

21" CORED SLAB

AREA: 522.3 in.² 3.6268 ft.²

WEIGHT: $3.6268 \times 150 = 544 \text{ lbs/ft.}$

 $Ixx = 25390 \text{ in}^4$ $Iyy = 62796 \text{ in}^4$

W = 3.00 ft.

 $J = 52094 \text{ in.}^4$

* = 16.00 in. C_{τ} = 10.596 in.

H = 21.00 in.

 $C_{R} = 10.404 \text{ in.}$

D = 12.00 in.

 $S_{T} = 2396 \text{ in.}3$

 $S_{R} = 2440 \text{ in.}3$

24" CORED SLAB

AREA: 630.3 in.² 4.3768 ft.²

WEIGHT: $4.3768 \times 150 = 657 \text{ lbs/ft.}$

 $I_{XX} = 38910 \text{ in.}^4$ $I_{YY} = 74460 \text{ in.}^4$

W = 3.00 ft.

 $J = 70159 in.^4$

* = 16.00 in.

 $C_{T} = 12.097 in.$

H = 24.00 in.

 $C_{\rm R} = 11.903$ in.

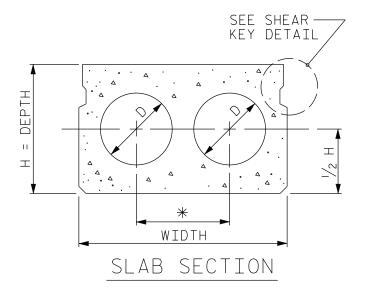
D = 12.00 in.

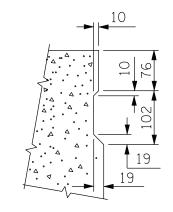
 $S_{T} = 3216 \text{ in.}3$

 $S_{R} = 3269 \text{ in.}3$

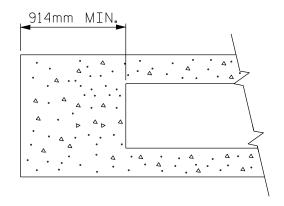
CORED SLAB PROPERTIES

FIGURE 6 - 81





SHEAR KEY DETAIL



TYP. LONGITUDINAL SECTION

FOR APPROX. MAX. SPAN FOR HL-93, SEE FIGURE 11-3

457mm CORED SLAB

AREA: $311.9 \times 10^{3} \text{mm}^{2}$ 0.3119 m²

WEIGHT: 0.3119 \times 23.6 = 7.36 kN/m

 $I_{XX} = 67.8 \times 10^8 \text{mm}^4$ $I_{YY} = 240.7 \times 10^8 \text{mm}^4$

W = 914mm

 $J = 153.5 \times 10^8 \, \text{mm}^4$

* = 381mm

 $C_{T} = 230.6 \text{mm}$

H = 457mm

 $C_{B} = 226.6$ mm

D = 254mm

 $S_T = 29.4 \times 10^6 \text{mm}^3$

 $S_{B} = 29.9 \times 10^{6} \, \text{mm}^{3}$

533mm CORED SLAB

AREA: $337.0 \times 10^{3} \, \text{mm}^{2}$

WEIGHT: $0.3370 \times 23.6 = 7.95 \text{ kN/m}$

 $IXX = 105.7 \times 10^8 \text{ mm}^4 IYY = 261.4 \times 10^8 \text{ mm}^4$

W = 914mm

 $J = 216.8 \times 10^8 \, \text{mm}^4$

* = 406mm

 $C_{T} = 269.1 \text{mm}$

H = 533mm

 $C_{R} = 264.3 \text{mm}$

D = 305mm

 $S_T = 39.3 \times 10^6 \, \text{mm}^3$

 $S_{R} = 40.0 \times 10^{6} \, \text{mm}^{3}$

610mm CORED SLAB

AREA: $406.6 \times 10^{3} \, \text{mm}^{2}$ 0.4066 m^{2}

WEIGHT: $0.4066 \times 23.6 = 9.60 \text{ kN/m}$

 $IXX = 162.0 \times 10^8 \, \text{mm}^4 \, IYY = 309.9 \times 10^8 \, \text{mm}^4$

W = 914mm

 $J = 292.0 \times 10^8 \, \text{mm}^4$

***** = 406mm

 $C_T = 307.3$ mm

H = 610mm

 $C_{R} = 302.3 \text{mm}$

D = 305mm

 $S_T = 52.7 \times 10^6 \, \text{mm}^3$

 $S_{\rm B} = 53.6 \times 10^{6} \, \text{mm}^{3}$

CORED SLAB PROPERTIES

FIGURE 6 - 81 M