WORLD TRADE CENTER
FLOOR GRID TRUSSES
DESIGN DATA

TRUSS UNIT MARKED 2C32T3A Refer to drawings ST 101,2,9,6,7.

Clearspan "L" = 59.08 ft. Spacing = 6.67 ft.

Applicable Total Moment = 1,855,000 inch pounds.

Based on — lbs./sq. ft. Total Load "w".

Applicable End Reaction = 14,000 pounds.

Based on 71 lbs./sq. ft. Total Load "w".

Total Center Moment = 1,915,000 inch pounds.

Based on 52 lbs./sq. ft. Construction Load.

Applicable Constr. End Reaction = 10,300 pounds.

Based on 52 lbs./sq. ft. Construction Load.

"V" Shear at End Panel = 12,580 pounds. ED = 3.0 ft.

WEB MEMBER #1 Distance from End Panel = 0.0 ft.

Applicable Shear $V_x$ = 12,580 lbs. $f_y$ = 50,000 psi

Slope = 2.65 $f_s$ = 30,000 psi

$l$ = — in. $f_{sc}$ = — psi

Reqd. Area = 1.11 sq. in. Use 2-0.92" dia. Area = 1.33 sq. in.

WEB MEMBER #2 Distance from End Panel = 0.0 ft.

Applicable Shear $V_x$ = 12,580 lbs. $f_y$ = 36,000 psi

Slope = 1.00 $f_s$ = — psi

$l$ = 26.0 in. $f_{sc}$ = 11,200 psi

Reqd. Area = 1.12 sq. in. Use 2-0.92" dia. Area = 1.33 sq. in.

WEB MEMBER #3 Distance from End Panel = 4.87 ft.

Applicable Shear $V_x$ = 10,270 lbs. $f_y$ = 36,000 psi

Slope = 1.162 $f_s$ = — psi

$l$ = 30.0 in. $f_{sc}$ = 8,750 psi

Reqd. Area = 1.36 sq. in. Use 2-0.92" dia. Area = 1.33 sq. in.