W14 - 31 ± 1470K)
P/WEB = .19 × 1470 = 279K
USE 9-1"ϕ A490 DS (STD HOLES)
P/FLG = .405 × 1470 = 595
USE 40-1"ϕ A490SS(F) 0"S HOLES
USE PL 18 × 1 3/4.

14A

W21 5/8 - 665
± 1240K.
(G504Y)

W15 3/4 - 211 (D414Y)
(SUB 2/WT 7 - 105.5)
± 230K
MIN 8 - 1"ϕ A490 F.
18

W15 - 159 (SUB 2/WT 7 - 79.5)
± 310K
12 - 1"ϕ A490K F.

12 / 9 3/8 / 178 / 146
12 / 259 / 170 / 7 7/8 / 12.

18 BOLTS
5 1/2
Ga - 5 1/2
PL - 1"
PL - 1"
PL 16 - 3/4 (TYP)
(SLOT AROUND G.PL)
5/8 SHIM.
3'-0
2'-6
2'-10
7/16
EL 375'-3 (SG)
(C480)
7
3'-4
G480
16
12 - 1"ϕ A490F
(AS OTHER SIDE)
3'-0
3'-0
3/8
18 - BOLTS
Ga - 5 1/2
Ga - 5 1/2

242 / 177 / 12 / 8 3/4 (N414Y)
W14 5/8 × 132 (SUB 2/WT 7 × 66)
± 300K
10 - 1"ϕ A490 F.

W21 5/8 × 665
± 1260K
A29

(D504Y)
W15 3/4 × 211
(SUB 2/WT 7 × 105.5)
± 210K
MIN 8 - 1"ϕ A490 F.
18

181 / 106 / 12 / 7

DETAIL (1/944)

WEB - 9-1"ϕ A490 (DS) (STD HOLES) } W17 7/8 × 311 ± 1470K.
FLG 40-1"ϕ A490 (SS) (F) (0"S HOLES) } W: 294K F: 588K

P/FLG = 70 × 12 / 14 - 62 + 310/2 = 212K
SAY USE 14-1"ϕ A490F
PL × 16 × 3/4 (16 - 5 × .75 × 26.4 = 218K)

W14 5/8 - 132 (WG)
50% NET TENS = 319K (P/FLG = 160K)
12 - 1"ϕ A490 F. 3. 5 1/2 3
VERT - 418 / 9.84 = 43K.
3 - 1"ϕ A 490 (STD HOLES)
MIN PL 10 × 1/2.

7

1144 / 923 / 12 / 9 11/16
3'-1 1/2
W19 5/8 - 500
± 1430K
C603X
8-U4a
30°
PP 5/16 9 / 14 45°
3'-10 11/16
A
PL 16 - 1
3'-3
2'-8
(D480)
9/16
PL 16 - 3/4
Ga 3.5 1/2.3
PL 7 - 3/4
5/16
5/8
5'-6 MIN
PL - 1 3/8
3/4
Col. Mk. A34 -
698 / 502 / 12 / 8 5/8
(D346Y)
W15 1/2 - 193
(SUB 2/WT 7 × 96.5)
± 860K.
32 - 1"ϕ A490F

444 / 358 / 12 / 9 11/16 (G346Y)
W17 1/2 - 342
(SUB 2/WT 7 × 171
± 570K
20 - 1"ϕ A490 F.
30
30 BOLTS
PL 1"
5'-0
3'-9
PL 7 - 5/8
PL 16 - 3/4
12 - 1"ϕ A490F
3.5 1/2.3.
(F479)
2'-6
A
4'-11 5/8"
PL 16 - 1
4'-11 5/8"
SLOT PL AROUND FLG (TYP)
4'-0 3/8
(B-U4a)
5/8
30°
5/16 9 (PP
1 5/8 45°
SUPPLY PL WITH BRACE
B603Y
1608 / 1156 / 12 / 8 5/8
W17 7/8 - 370
± 1980K.
WEB = 396K
FLG = 792K

LOAD IN FLG = 947 × 2 =
LOAD IN WEB = 87K
SAY USE 9-1"ϕ A490F (SS)
WITH 1/PL 10 × 1.

W19 5/8 × 500
± 1270K.
2'-10 13/16

DETAIL (2/944)

PL 16 - 3/4
TOP HORIZ PL. 5/16 45° 9/16 45°
BOTT HORIZ PL. 5/16 45° 9/16 45°

SECT ~ A-A

WEST ELEVATION (DIAGE120)

DETAILER NOTE.
EXTEND 3/8 SHIM PL ON FLR BEAM, BACK BOLT SHIMS FOR ERECTION. PROVIDE DECK SUPPORT L'S AND PL STOPS FOR CONC. AS REQD

ALL MATERIAL A36 U/N
ALL CONN MATL G40.21 GR 44W.
WELD - E70XX.

WORK THIS DWG WITH DWG # FW31

E120 · EG

REVISED			
DATE ____ BY ____	OPEN HOLES ____	7 WORLD TRADE CENTER	
DATE ____ BY ____	PAINT ____	47 STORY OFFICE BUILDING	
DATE ____ BY ____	ERECTED BY ____	TISHMAN CONSTRUCTION.	CUSTOMER
DATE ____ BY ____	FIELD PAINT ____	EMERY ROTH & SONS PC	ARCHITECT
DATE ____ BY ____	INSPECTION ____	IRWIN G CANTOR PC	ENGINEER

FRANKEL STEEL LIMITED
220 ATTWELL DRIVE UNIT 1 REXDALE, ONTARIO M9W 5B2

SQUAD FR
MADE BY ACS DATE NOV '84 CHKD. BY IS DATE APR 85
CONT. No. 84-15 SHEET 944

FW31