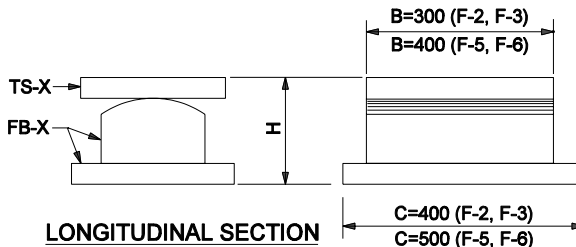
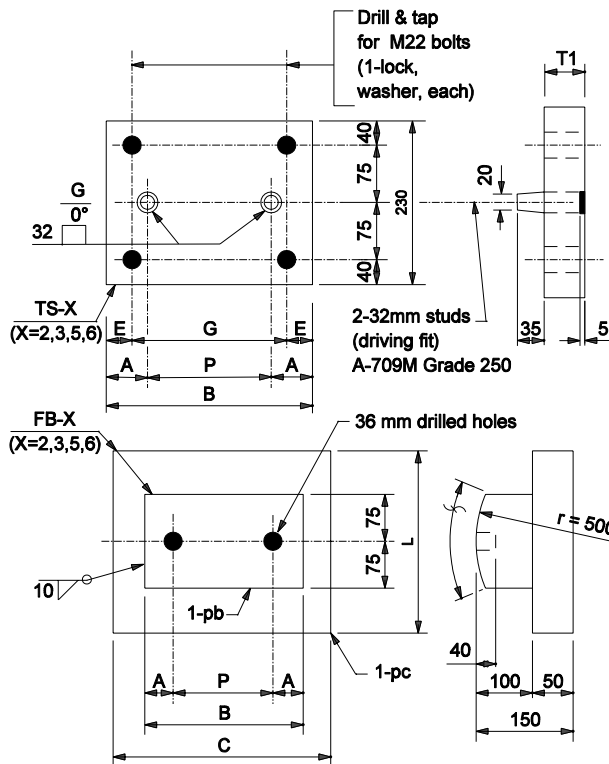


FIXED SHOE ASSEMBLY



LONGITUDINAL SECTION

Shoe Type	Maximum Reaction	Shoe Assembly		H
		TS-X	FB-X	
F-2	1787 kN	TS-2	FB-2	200
F-3	1090 kN	TS-3	FB-3	195
F-5	1000 kN	TS-5	FB-5	200
F-6	1375 kN	TS-6	FB-6	195

TS-X	B	T1	E	G	A	P	Section	Material
TS-1*	305	45	55	190	55	190	ℙ 230 x 45	A-709 Grade 250
TS-2	305	50	55	190	65	180	ℙ 230 x 50	A-709 Grade 345W
TS-3	305	50	55	190	70	160	ℙ 230 x 50	A-709 Grade 690
TS-4*	405	45	75	250	75	250	ℙ 230 x 45	A-709 Grade 250
TS-5	405	50	75	250	85	240	ℙ 230 x 50	A-709 Grade 345W
TS-6	405	50	75	250	95	220	ℙ 230 x 50	A-709 Grade 690

* Top shoe used with Expansion Steel Shoe only.

TOP SHOE

FB-X	C	L	B	A	P	Sections	
						pb	pc
FB-2	400	300	300	60	180	ℙ 150 x 100	ℙ 300 x 50
FB-3	400	400	300	70	160	ℙ 150 x 100	ℙ 400 x 50
FB-5	500	300	400	80	240	ℙ 150 x 100	ℙ 300 x 50
FB-6	500	400	400	90	220	ℙ 150 x 100	ℙ 400 x 50

FIXED BASE

NOTES :

1. Curved surfaces of shoes to be machined after weldments have been completed. At the contractor's option the following substitutions of materials will be allowed at no increase in unit price of material:

- a). A-709M Grade 345W steel may be used in lieu of A-709M Grade 250 steel.
 - b). A-709M Grade 690 steel may be used in lieu of A-709M Grade 345W or A-709M Grade 250 steels.
2. Section "pb" to be finished from 100 mm thickness while Section "pc" is to be straightened.
3. Maximum horizontal thrust per Fixed Shoe = 22kN.

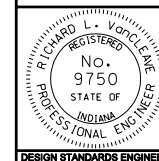
All Dimension are in mm unless otherwise specified

INDIANA DEPARTMENT OF TRANSPORTATION

FIXED STEEL SHOE DETAILS

MARCH 2005

STANDARD DRAWING NO. 711-BSTS-01



/s/ Richard L. VanCleave 3-01-05
DESIGN STANDARDS ENGINEER DATE

/s/ Richard Smutzer 3-01-05
CHIEF HIGHWAY ENGINEER DATE

DESIGN STANDARDS ENGINEER