

Stiffener Type	Panel Width, mm													Stiffener Type	
	400	500	600	800	1000	1250	1500	1600	1800	2000	2500	3000	3500	4000	
R1	4.9	2.9	1.9	1.0	0.5	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	R1
R2	11.4	6.7	4.4	2.4	1.5	0.8	0.4	0.4	0.3	0.2	0.1	0.1	0.0	0.0	R2
R3	20.7	12.2	8.0	4.5	2.9	1.7	1.0	0.8	0.6	0.4	0.2	0.1	0.1	0.1	R3
R4	30.1	17.6	11.6	6.5	4.1	2.6	1.8	1.6	1.1	0.8	0.4	0.2	0.2	0.1	R4
R5	47.5	27.9	18.3	10.2	6.5	4.2	2.9	2.4	1.7	1.3	0.6	0.4	0.2	0.2	R5
R6	62.4	36.6	24.1	13.4	8.6	5.5	3.8	3.3	2.6	2.1	1.1	0.6	0.4	0.3	R6
R7	89.6	52.6	34.6	19.2	12.3	7.9	5.5	4.8	3.8	3.0	1.5	0.9	0.6	0.4	R7
R8	119.5	70.1	46.1	25.7	16.4	10.5	7.3	6.4	5.1	4.1	2.4	1.4	0.9	0.6	R8
R9	166.2	97.5	64.1	35.7	22.9	14.6	10.2	8.9	7.1	5.7	3.4	2.0	1.2	0.8	R9
R10	204.2	119.8	78.8	43.9	28.1	18.0	12.5	11.0	8.7	7.0	4.5	3.1	2.1	1.4	R10
R11	307.0	180.1	118.5	66.0	42.2	27.0	18.8	16.5	13.0	10.6	6.8	4.7	3.0	2.0	R11
R12	383.0	224.7	147.8	82.3	52.7	33.7	23.4	20.6	16.3	13.2	8.4	5.9	4.3	3.3	R12
R13	460.6	270.2	177.8	98.9	63.3	40.5	28.1	24.7	19.5	15.8	10.1	7.0	5.2	3.6	R13
R14	525.5	308.3	202.8	112.9	72.2	46.2	32.1	28.2	22.3	18.1	11.6	8.0	5.9	4.5	R14
R15	712.2	417.8	274.9	153.0	97.9	62.7	43.5	38.3	30.2	24.5	15.7	10.9	7.6	5.1	R15
R16	800.8	469.8	309.1	172.1	110.1	70.5	48.9	43.0	34.0	27.5	17.6	12.2	8.5	5.7	R16
R17	962.3	564.5	371.4	206.7	132.3	84.7	58.8	51.7	40.8	33.1	21.2	14.7	10.5	7.0	R17
R18	1,156.9	678.7	446.5	248.6	159.1	101.8	70.7	62.1	49.1	39.8	25.5	17.7	12.4	8.3	R18
R19	1,234.5	724.2	476.5	265.2	169.7	108.6	75.4	66.3	52.4	42.4	27.2	18.9	13.9	10.6	R19
R20	1,429.2	838.4	551.6	307.0	196.5	125.8	87.3	76.8	60.7	49.1	31.4	21.8	16.0	12.3	R20
R21	1,725.1	1,012.1	665.8	370.6	237.2	151.8	105.4	92.7	73.2	59.3	38.0	26.4	19.4	14.8	R21
R22	1,899.2	1,114.2	733.0	408.0	261.1	167.1	116.1	102.0	80.6	65.3	41.8	29.0	21.3	16.3	R22
R23	2,184.1	1,281.3	843.0	469.2	300.3	192.2	133.5	117.3	92.7	75.1	48.1	33.4	24.5	18.8	R23
R24	2,500.7	1,467.1	965.2	537.2	343.8	220.1	152.8	134.3	106.1	86.0	55.0	38.2	28.1	21.5	R24
R25	3,244.5	1,903.5	1,252.3	697.1	446.1	285.5	198.3	174.3	137.7	111.5	71.4	49.6	36.4	27.9	R25
R26	3,814.3	2,237.7	1,472.2	819.5	524.5	335.7	233.1	204.9	161.9	131.1	83.9	58.3	42.8	32.8	R26
R27	4,399.9	2,581.3	1,698.2	945.3	605.0	387.2	268.9	236.3	186.7	151.2	96.8	67.2	49.4	37.8	R27
R28	4,985.5	2,924.8	1,924.2	1,071.1	685.5	438.7	304.7	267.8	211.6	171.4	109.7	76.2	56.0	42.8	R28
R29	5,412.8	3,175.5	2,089.2	1,162.9	744.3	476.3	330.8	290.7	229.7	186.1	119.1	82.7	60.8	46.5	R29
R30	5,555.3	3,259.1	2,144.1	1,193.5	763.8	488.9	339.5	298.4	235.8	191.0	122.2	84.9	62.4	47.7	R30
Temperature Correction Factors for Carbon Steel Structural Shapes															
Deg. C	-30 to 40	100	150	200	250	300	350								
η_f	1.00	0.91	0.89	0.86	0.82	0.76	0.73								

Table 6-B5 Pressure Capacity Table for Carbon Steel Reinforcements Spaced at 1250 mm Intervals

NOTES:

- Stiffener Types refer to a classification system which groups various structural shapes having approximately equivalent physical characteristics, see Table 8-D for a complete listing of the available structural shapes and the physical characteristics assigned to each reinforcement class.
- Each column lists pressure capacity in kPa for a panel width (W) in mm. The pressure capacity of each reinforcement class is based on a stiffener maximum allowable stress of ($\eta_f \times F_y / 1.5 = 166$ MPa) and a corresponding deflection of not more than ($W/360$).
- The pressure capacity values listed in this table can be taken as positive or negative as required by the intended application, and are based on a yield strength of 249 MPa characteristic of ISO 4951 Structural Quality Hot-rolled Steel. For un-fixed stiffeners the pressure capacity values must be reduced by multiplying by a factor of 0.80.
- While the pressure capacities listed are intended for systems operating at ambient temperatures they may be adjusted for higher temperatures by multiplying by the appropriate value of (η_f), up to a maximum operating temperature of (204° C) for galvanized steel products and (343° C) for carbon steel.

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Stiffener Type	Panel Width, mm													Stiffener Type	
	400	500	600	800	1000	1250	1500	1600	1800	2000	2500	3000	3500	4000	
R1	4.4	2.5	1.6	0.8	0.4	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	R1
R2	10.2	5.8	3.7	1.9	1.2	0.6	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	R2
R3	18.6	10.5	6.7	3.5	2.2	1.3	0.8	0.6	0.4	0.3	0.2	0.1	0.1	0.0	R3
R4	26.9	15.2	9.8	5.0	3.2	2.1	1.4	1.2	0.9	0.6	0.3	0.2	0.1	0.1	R4
R5	42.5	24.0	15.5	8.0	5.1	3.3	2.3	1.9	1.3	1.0	0.5	0.3	0.2	0.1	R5
R6	55.8	31.5	20.3	10.5	6.7	4.3	3.0	2.6	2.1	1.7	0.8	0.5	0.3	0.2	R6
R7	80.2	45.3	29.2	15.0	9.6	6.2	4.3	3.8	3.0	2.3	1.2	0.7	0.4	0.3	R7
R8	107.0	60.4	38.9	20.1	12.8	8.2	5.7	5.0	4.0	3.2	1.8	1.1	0.7	0.4	R8
R9	148.8	84.0	54.1	27.9	17.9	11.4	7.9	7.0	5.5	4.5	2.7	1.5	1.0	0.7	R9
R10	182.8	103.2	66.5	34.3	21.9	14.0	9.7	8.6	6.8	5.5	3.5	2.4	1.6	1.1	R10
R11	274.9	155.2	99.9	51.5	33.0	21.1	14.7	12.9	10.2	8.2	5.3	3.7	2.3	1.6	R11
R12	342.9	193.6	124.7	64.3	41.1	26.3	18.3	16.1	12.7	10.3	6.6	4.6	3.4	2.6	R12
R13	412.3	232.8	149.9	77.3	49.5	31.7	22.0	19.3	15.3	12.4	7.9	5.5	4.0	2.8	R13
R14	470.4	265.6	171.0	88.2	56.4	36.1	25.1	22.0	17.4	14.1	9.0	6.3	4.6	3.5	R14
R15	637.6	360.0	231.8	119.5	76.5	49.0	34.0	29.9	23.6	19.1	12.2	8.5	5.9	4.0	R15
R16	716.9	404.8	260.7	134.4	86.0	55.1	38.2	33.6	26.6	21.5	13.8	9.6	6.7	4.5	R16
R17	861.4	486.4	313.2	161.5	103.4	66.2	45.9	40.4	31.9	25.8	16.5	11.5	8.2	5.5	R17
R18	1,035.7	584.9	376.6	194.2	124.3	79.5	55.2	48.5	38.4	31.1	19.9	13.8	9.7	6.5	R18
R19	1,105.1	624.1	401.9	207.2	132.6	84.9	58.9	51.8	40.9	33.2	21.2	14.7	10.8	8.3	R19
R20	1,279.4	722.5	465.2	239.9	153.5	98.3	68.2	60.0	47.4	38.4	24.6	17.1	12.5	9.6	R20
R21	1,544.3	872.1	561.6	289.6	185.3	118.6	82.4	72.4	57.2	46.3	29.7	20.6	15.1	11.6	R21
R22	1,700.2	960.1	618.2	318.8	204.0	130.6	90.7	79.7	63.0	51.0	32.6	22.7	16.7	12.8	R22
R23	1,955.2	1,104.1	711.0	366.6	234.6	150.2	104.3	91.6	72.4	58.7	37.5	26.1	19.2	14.7	R23
R24	2,238.5	1,264.1	814.0	419.7	268.6	171.9	119.4	104.9	82.9	67.2	43.0	29.8	21.9	16.8	R24
R25	2,904.4	1,640.2	1,056.2	544.6	348.5	223.1	154.9	136.1	107.6	87.1	55.8	38.7	28.5	21.8	R25
R26	3,414.5	1,928.2	1,241.6	640.2	409.7	262.2	182.1	160.1	126.5	102.4	65.6	45.5	33.4	25.6	R26
R27	3,938.7	2,224.2	1,432.3	738.5	472.6	302.5	210.1	184.6	145.9	118.2	75.6	52.5	38.6	29.5	R27
R28	4,462.9	2,520.2	1,622.9	836.8	535.5	342.8	238.0	209.2	165.3	133.9	85.7	59.5	43.7	33.5	R28
R29	4,845.4	2,736.3	1,762.0	908.5	581.5	372.1	258.4	227.1	179.5	145.4	93.0	64.6	47.5	36.3	R29
R30	4,973.0	2,808.3	1,808.3	932.4	596.8	381.9	265.2	233.1	184.2	149.2	95.5	66.3	48.7	37.3	R30
Temperature Correction Factors for Carbon Steel Structural Shapes															
Deg. C	-30 to 40	100	150	200	250	300	350								
η_f	1.00	0.91	0.89	0.86	0.82	0.76	0.73								

Table 6-B6 Pressure Capacity Table for Carbon Steel Reinforcements Spaced at 1600 mm Intervals**NOTES:**

- Stiffener Types refer to a classification system which groups various structural shapes having approximately equivalent physical characteristics, see Table 8-D for a complete listing of the available structural shapes and the physical characteristics assigned to each reinforcement class.
- Each column lists pressure capacity in kPa for a panel width (W) in mm. The pressure capacity of each reinforcement class is based on a stiffener maximum allowable stress of ($\eta_f \times F_y / 1.5 = 166$ MPa) and a corresponding deflection of not more than ($W/360$).
- The pressure capacity values listed in this table can be taken as positive or negative as required by the intended application, and are based on a yield strength of 249 MPa characteristic of ISO 4951 Structural Quality Hot-rolled Steel. For un-fixed stiffeners the pressure capacity values must be reduced by multiplying by a factor of 0.80.
- While the pressure capacities listed are intended for systems operating at ambient temperatures they may be adjusted for higher temperatures by multiplying by the appropriate value of (η_f), up to a maximum operating temperature of (204° C) for galvanized steel products and (343° C) for carbon steel.

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CS-249 MPa
Spacing
Capacity

STRUCTURAL GR. CS-249 MPa
Table 6-B7 2000 mm Spacing
Fixed Stiffener Pressure Capacity

6.102

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Stiffener Type	Panel Width, mm													Stiffener Type	
	400	500	600	800	1000	1250	1500	1600	1800	2000	2500	3000	3500	4000	
R1	4.2	2.2	1.4	0.7	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	R1
R2	9.8	5.2	3.3	1.6	0.9	0.5	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	R2
R3	17.8	9.5	5.9	3.0	1.8	1.1	0.6	0.5	0.4	0.3	0.1	0.1	0.0	0.0	R3
R4	25.8	13.8	8.6	4.3	2.6	1.7	1.1	1.0	0.7	0.5	0.3	0.2	0.1	0.1	R4
R5	40.8	21.8	13.6	6.8	4.1	2.6	1.8	1.5	1.1	0.8	0.4	0.2	0.1	0.1	R5
R6	53.6	28.6	17.9	8.9	5.4	3.4	2.4	2.1	1.7	1.3	0.7	0.4	0.2	0.2	R6
R7	77.0	41.1	25.7	12.8	7.7	4.9	3.4	3.0	2.4	1.9	0.9	0.5	0.3	0.2	R7
R8	102.7	54.8	34.2	17.1	10.3	6.6	4.6	4.0	3.2	2.6	1.5	0.9	0.5	0.4	R8
R9	142.8	76.2	47.6	23.8	14.3	9.1	6.3	5.6	4.4	3.6	2.1	1.2	0.8	0.5	R9
R10	175.5	93.6	58.5	29.2	17.5	11.2	7.8	6.9	5.4	4.4	2.8	1.9	1.3	0.9	R10
R11	263.9	140.7	88.0	44.0	26.4	16.9	11.7	10.3	8.1	6.6	4.2	2.9	1.9	1.3	R11
R12	329.2	175.5	109.7	54.9	32.9	21.1	14.6	12.9	10.2	8.2	5.3	3.7	2.7	2.1	R12
R13	395.8	211.1	131.9	66.0	39.6	25.3	17.6	15.5	12.2	9.9	6.3	4.4	3.2	2.2	R13
R14	451.6	240.8	150.5	75.3	45.2	28.9	20.1	17.6	13.9	11.3	7.2	5.0	3.7	2.8	R14
R15	612.1	326.4	204.0	102.0	61.2	39.2	27.2	23.9	18.9	15.3	9.8	6.8	4.7	3.2	R15
R16	688.2	367.1	229.4	114.7	68.8	44.0	30.6	26.9	21.2	17.2	11.0	7.6	5.3	3.6	R16
R17	827.0	441.0	275.7	137.8	82.7	52.9	36.8	32.3	25.5	20.7	13.2	9.2	6.6	4.4	R17
R18	994.3	530.3	331.4	165.7	99.4	63.6	44.2	38.8	30.7	24.9	15.9	11.0	7.8	5.2	R18
R19	1,060.9	565.8	353.6	176.8	106.1	67.9	47.2	41.4	32.7	26.5	17.0	11.8	8.7	6.6	R19
R20	1,228.2	655.0	409.4	204.7	122.8	78.6	54.6	48.0	37.9	30.7	19.7	13.6	10.0	7.7	R20
R21	1,482.5	790.7	494.2	247.1	148.3	94.9	65.9	57.9	45.8	37.1	23.7	16.5	12.1	9.3	R21
R22	1,632.2	870.5	544.1	272.0	163.2	104.5	72.5	63.8	50.4	40.8	26.1	18.1	13.3	10.2	R22
R23	1,877.0	1,001.1	625.7	312.8	187.7	120.1	83.4	73.3	57.9	46.9	30.0	20.9	15.3	11.7	R23
R24	2,149.0	1,146.1	716.3	358.2	214.9	137.5	95.5	83.9	66.3	53.7	34.4	23.9	17.5	13.4	R24
R25	2,788.3	1,487.1	929.4	464.7	278.8	178.4	123.9	108.9	86.1	69.7	44.6	31.0	22.8	17.4	R25
R26	3,277.9	1,748.2	1,092.6	546.3	327.8	209.8	145.7	128.0	101.2	81.9	52.4	36.4	26.8	20.5	R26
R27	3,781.2	2,016.6	1,260.4	630.2	378.1	242.0	168.1	147.7	116.7	94.5	60.5	42.0	30.9	23.6	R27
R28	4,284.4	2,285.0	1,428.1	714.1	428.4	274.2	190.4	167.4	132.2	107.1	68.6	47.6	35.0	26.8	R28
R29	4,651.6	2,480.9	1,550.5	775.3	465.2	297.7	206.7	181.7	143.6	116.3	74.4	51.7	38.0	29.1	R29
R30	4,774.0	2,546.2	1,591.3	795.7	477.4	305.5	212.2	186.5	147.3	119.4	76.4	53.0	39.0	29.8	R30
Temperature Correction Factors for Carbon Steel Structural Shapes															
Deg. C	-30 to 40	100	150	200	250	300	350								
η_f	1.00	0.91	0.89	0.86	0.82	0.76	0.73								

Table 6-B7 Pressure Capacity Table for Carbon Steel Reinforcements Spaced at 2000 mm Intervals

NOTES:

- Stiffener Types refer to a classification system which groups various structural shapes having approximately equivalent physical characteristics, see Table 8-D for a complete listing of the available structural shapes and the physical characteristics assigned to each reinforcement class.
- Each column lists pressure capacity in kPa for a panel width (W) in mm. The pressure capacity of each reinforcement class is based on a stiffener maximum allowable stress of ($\eta_f \times F_y / 1.5 = 166$ MPa) and a corresponding deflection of not more than ($W/360$).
- The pressure capacity values listed in this table can be taken as positive or negative as required by the intended application, and are based on a yield strength of 249 MPa characteristic of ISO 4951 Structural Quality Hot-rolled Steel. For un-fixed stiffeners the pressure capacity values must be reduced by multiplying by a factor of 0.80.
- While the pressure capacities listed are intended for systems operating at ambient temperatures they may be adjusted for higher temperatures by multiplying by the appropriate value of (η_f), up to a maximum operating temperature of (204° C) for galvanized steel products and (343° C) for carbon steel.

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Stiffener Type	Panel Width, mm														Stiffener Type
	400	500	600	800	1000	1250	1500	1600	1800	2000	2500	3000	3500	4000	
R1	4.5	2.2	1.3	0.6	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	R1
R2	10.4	5.0	3.0	1.4	0.8	0.4	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	R2
R3	19.0	9.1	5.4	2.6	1.5	0.9	0.5	0.4	0.3	0.2	0.1	0.1	0.0	0.0	R3
R4	27.6	13.2	7.9	3.8	2.2	1.3	0.9	0.8	0.6	0.4	0.2	0.1	0.1	0.1	R4
R5	43.5	20.9	12.4	5.9	3.5	2.1	1.5	1.2	0.9	0.6	0.3	0.2	0.1	0.1	R5
R6	57.2	27.4	16.3	7.8	4.6	2.7	1.9	1.7	1.3	1.1	0.5	0.3	0.2	0.1	R6
R7	82.1	39.4	23.5	11.2	6.6	3.9	2.7	2.4	1.9	1.5	0.8	0.4	0.3	0.2	R7
R8	109.5	52.6	31.3	14.9	8.8	5.3	3.7	3.2	2.5	2.1	1.2	0.7	0.4	0.3	R8
R9	152.3	73.1	43.5	20.8	12.2	7.3	5.1	4.5	3.5	2.9	1.7	1.0	0.6	0.4	R9
R10	187.2	89.8	53.5	25.5	15.0	9.0	6.2	5.5	4.3	3.5	2.2	1.6	1.0	0.7	R10
R11	281.5	135.1	80.4	38.4	22.5	13.5	9.4	8.2	6.5	5.3	3.4	2.3	1.5	1.0	R11
R12	351.1	168.5	100.3	47.9	28.1	16.9	11.7	10.3	8.1	6.6	4.2	2.9	2.1	1.6	R12
R13	422.2	202.6	120.6	57.6	33.8	20.3	14.1	12.4	9.8	7.9	5.1	3.5	2.6	1.8	R13
R14	481.7	231.2	137.6	65.7	38.5	23.1	16.1	14.1	11.1	9.0	5.8	4.0	2.9	2.3	R14
R15	652.9	313.4	186.5	89.0	52.2	31.3	21.8	19.1	15.1	12.2	7.8	5.4	3.8	2.5	R15
R16	734.1	352.4	209.7	100.1	58.7	35.2	24.5	21.5	17.0	13.8	8.8	6.1	4.3	2.9	R16
R17	882.1	423.4	252.0	120.3	70.6	42.3	29.4	25.8	20.4	16.5	10.6	7.4	5.3	3.5	R17
R18	1,060.5	509.1	303.0	144.6	84.8	50.9	35.4	31.1	24.5	19.9	12.7	8.8	6.2	4.2	R18
R19	1,131.6	543.2	323.3	154.3	90.5	54.3	37.7	33.2	26.2	21.2	13.6	9.4	6.9	5.3	R19
R20	1,310.1	628.8	374.3	178.6	104.8	62.9	43.7	38.4	30.3	24.6	15.7	10.9	8.0	6.1	R20
R21	1,581.4	759.1	451.8	215.6	126.5	75.9	52.7	46.3	36.6	29.7	19.0	13.2	9.7	7.4	R21
R22	1,741.0	835.7	497.4	237.4	139.3	83.6	58.0	51.0	40.3	32.6	20.9	14.5	10.7	8.2	R22
R23	2,002.1	961.0	572.0	273.0	160.2	96.1	66.7	58.7	46.3	37.5	24.0	16.7	12.3	9.4	R23
R24	2,292.3	1,100.3	654.9	312.6	183.4	110.0	76.4	67.2	53.1	43.0	27.5	19.1	14.0	10.7	R24
R25	2,974.1	1,427.6	849.8	405.6	237.9	142.8	99.1	87.1	68.8	55.8	35.7	24.8	18.2	13.9	R25
R26	3,496.4	1,678.3	999.0	476.8	279.7	167.8	116.5	102.4	80.9	65.6	42.0	29.1	21.4	16.4	R26
R27	4,033.2	1,935.9	1,152.4	550.0	322.7	193.6	134.4	118.2	93.4	75.6	48.4	33.6	24.7	18.9	R27
R28	4,570.0	2,193.6	1,305.7	623.2	365.6	219.4	152.3	133.9	105.8	85.7	54.8	38.1	28.0	21.4	R28
R29	4,961.7	2,381.6	1,417.6	676.6	396.9	238.2	165.4	145.4	114.9	93.0	59.5	41.3	30.4	23.3	R29
R30	5,092.3	2,444.3	1,454.9	694.4	407.4	244.4	169.7	149.2	117.9	95.5	61.1	42.4	31.2	23.9	R30
Temperature Correction Factors for Carbon Steel Structural Shapes															
Deg. C	-30 to 40	100	150	200	250	300	350								
η_f	1.00	0.91	0.89	0.86	0.82	0.76	0.73								

Table 6-B8 Pressure Capacity Table for Carbon Steel Reinforcements Spaced at 2500 mm Intervals

NOTES:

- Stiffener Types refer to a classification system which groups various structural shapes having approximately equivalent physical characteristics, see Table 8-D for a complete listing of the available structural shapes and the physical characteristics assigned to each reinforcement class.
- Each column lists pressure capacity in kPa for a panel width (W) in mm. The pressure capacity of each reinforcement class is based on a stiffener maximum allowable stress of ($\eta_f \times F_y / 1.5 = 166$ MPa) and a corresponding deflection of not more than ($W/360$).
- The pressure capacity values listed in this table can be taken as positive or negative as required by the intended application, and are based on a yield strength of 249 MPa characteristic of ISO 4951 Structural Quality Hot-rolled Steel. For un-fixed stiffeners the pressure capacity values must be reduced by multiplying by a factor of 0.80.
- While the pressure capacities listed are intended for systems operating at ambient temperatures they may be adjusted for higher temperatures by multiplying by the appropriate value of (η_f), up to a maximum operating temperature of (204° C) for galvanized steel products and (343° C) for carbon steel.

Stiffener Type	Panel Width, mm													Stiffener Type	
	400	500	600	800	1000	1250	1500	1600	1800	2000	2500	3000	3500	4000	
R1	5.6	2.2	1.2	0.6	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	R1
R2	13.1	5.2	2.9	1.3	0.7	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	R2
R3	23.8	9.5	5.3	2.4	1.4	0.8	0.4	0.3	0.2	0.2	0.1	0.1	0.0	0.0	R3
R4	34.5	13.8	7.7	3.4	2.0	1.2	0.8	0.7	0.5	0.3	0.2	0.1	0.1	0.0	R4
R5	54.4	21.8	12.1	5.4	3.1	1.8	1.2	1.0	0.7	0.5	0.3	0.2	0.1	0.1	R5
R6	71.5	28.6	15.9	7.1	4.1	2.4	1.6	1.4	1.1	0.9	0.5	0.3	0.2	0.1	R6
R7	102.6	41.1	22.8	10.3	5.9	3.5	2.3	2.0	1.6	1.2	0.6	0.4	0.2	0.2	R7
R8	136.9	54.8	30.4	13.7	7.8	4.6	3.0	2.7	2.1	1.7	1.0	0.6	0.4	0.2	R8
R9	190.4	76.2	42.3	19.0	10.9	6.4	4.2	3.7	2.9	2.4	1.4	0.8	0.5	0.3	R9
R10	233.9	93.6	52.0	23.4	13.4	7.9	5.2	4.6	3.6	2.9	1.9	1.3	0.9	0.6	R10
R11	351.8	140.7	78.2	35.2	20.1	11.9	7.8	6.9	5.4	4.4	2.8	2.0	1.2	0.8	R11
R12	438.9	175.5	97.5	43.9	25.1	14.8	9.8	8.6	6.8	5.5	3.5	2.4	1.8	1.4	R12
R13	527.7	211.1	117.3	52.8	30.2	17.8	11.7	10.3	8.1	6.6	4.2	2.9	2.2	1.5	R13
R14	602.1	240.8	133.8	60.2	34.4	20.3	13.4	11.8	9.3	7.5	4.8	3.3	2.5	1.9	R14
R15	816.1	326.4	181.4	81.6	46.6	27.5	18.1	15.9	12.6	10.2	6.5	4.5	3.2	2.1	R15
R16	917.6	367.1	203.9	91.8	52.4	30.9	20.4	17.9	14.2	11.5	7.3	5.1	3.6	2.4	R16
R17	1,102.6	441.0	245.0	110.3	63.0	37.1	24.5	21.5	17.0	13.8	8.8	6.1	4.4	2.9	R17
R18	1,325.7	530.3	294.6	132.6	75.8	44.7	29.5	25.9	20.5	16.6	10.6	7.4	5.2	3.5	R18
R19	1,414.5	565.8	314.3	141.5	80.8	47.6	31.4	27.6	21.8	17.7	11.3	7.9	5.8	4.4	R19
R20	1,637.6	655.0	363.9	163.8	93.6	55.2	36.4	32.0	25.3	20.5	13.1	9.1	6.7	5.1	R20
R21	1,976.7	790.7	439.3	197.7	113.0	66.6	43.9	38.6	30.5	24.7	15.8	11.0	8.1	6.2	R21
R22	2,176.2	870.5	483.6	217.6	124.4	73.3	48.4	42.5	33.6	27.2	17.4	12.1	8.9	6.8	R22
R23	2,502.6	1,001.1	556.1	250.3	143.0	84.3	55.6	48.9	38.6	31.3	20.0	13.9	10.2	7.8	R23
R24	2,865.3	1,146.1	636.7	286.5	163.7	96.5	63.7	56.0	44.2	35.8	22.9	15.9	11.7	9.0	R24
R25	3,717.7	1,487.1	826.2	371.8	212.4	125.2	82.6	72.6	57.4	46.5	29.7	20.7	15.2	11.6	R25
R26	4,370.5	1,748.2	971.2	437.1	249.7	147.2	97.1	85.4	67.4	54.6	35.0	24.3	17.8	13.7	R26
R27	5,041.5	2,016.6	1,120.3	504.2	288.1	169.8	112.0	98.5	77.8	63.0	40.3	28.0	20.6	15.8	R27
R28	5,712.5	2,285.0	1,269.5	571.3	326.4	192.4	126.9	111.6	88.2	71.4	45.7	31.7	23.3	17.9	R28
R29	6,202.2	2,480.9	1,378.3	620.2	354.4	208.9	137.8	121.1	95.7	77.5	49.6	34.5	25.3	19.4	R29
R30	6,365.4	2,546.2	1,414.5	636.5	363.7	214.4	141.5	124.3	98.2	79.6	50.9	35.4	26.0	19.9	R30
Temperature Correction Factors for Carbon Steel Structural Shapes															
Deg. C	-30 to 40	100	150	200	250	300	350								
η_f	1.00	0.91	0.89	0.86	0.82	0.76	0.73								

Table 6-B9 Pressure Capacity Table for Carbon Steel Reinforcements Spaced at 3000 mm Intervals

NOTES:

- Stiffener Types refer to a classification system which groups various structural shapes having approximately equivalent physical characteristics, see Table 8-D for a complete listing of the available structural shapes and the physical characteristics assigned to each reinforcement class.
- Each column lists pressure capacity in kPa for a panel width (W) in mm. The pressure capacity of each reinforcement class is based on a stiffener maximum allowable stress of ($\eta_f \times F_y / 1.5 = 166$ MPa) and a corresponding deflection of not more than ($W/360$).
- The pressure capacity values listed in this table can be taken as positive or negative as required by the intended application, and are based on a yield strength of 249 MPa characteristic of ISO 4951 Structural Quality Hot-rolled Steel. For un-fixed stiffeners the pressure capacity values must be reduced by multiplying by a factor of 0.80.
- While the pressure capacities listed are intended for systems operating at ambient temperatures they may be adjusted for higher temperatures by multiplying by the appropriate value of (η_f), up to a maximum operating temperature of (204° C) for galvanized steel products and (343° C) for carbon steel.

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Stiffener Type	Panel Width, mm													Stiffener Type	
	400	500	600	800	1000	1250	1500	1600	1800	2000	2500	3000	3500	4000	
R1	19.8	3.4	1.4	0.5	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	R1
R2	45.9	7.8	3.3	1.2	0.6	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	R2
R3	83.5	14.3	5.9	2.2	1.2	0.6	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	R3
R4	121.1	20.7	8.6	3.2	1.7	1.0	0.6	0.5	0.4	0.3	0.1	0.1	0.0	0.0	R4
R5	191.3	32.6	13.6	5.1	2.7	1.5	1.0	0.8	0.6	0.4	0.2	0.1	0.1	0.0	R5
R6	251.2	42.9	17.9	6.7	3.6	2.0	1.3	1.1	0.9	0.7	0.3	0.2	0.1	0.1	R6
R7	360.9	61.6	25.7	9.6	5.1	2.9	1.9	1.6	1.2	0.9	0.5	0.3	0.2	0.1	R7
R8	481.4	82.2	34.2	12.8	6.8	3.9	2.5	2.1	1.6	1.3	0.7	0.4	0.3	0.2	R8
R9	669.4	114.3	47.6	17.9	9.5	5.4	3.5	3.0	2.3	1.8	1.1	0.6	0.4	0.3	R9
R10	822.5	140.4	58.5	21.9	11.7	6.6	4.3	3.7	2.8	2.2	1.4	1.0	0.7	0.4	R10
R11	1,236.9	211.1	88.0	33.0	17.6	9.9	6.4	5.5	4.2	3.3	2.1	1.5	0.9	0.6	R11
R12	1,542.9	263.3	109.7	41.1	21.9	12.4	8.0	6.9	5.2	4.1	2.6	1.8	1.3	1.0	R12
R13	1,855.3	316.6	131.9	49.5	26.4	14.9	9.6	8.2	6.3	4.9	3.2	2.2	1.6	1.1	R13
R14	2,116.7	361.2	150.5	56.4	30.1	17.0	10.9	9.4	7.2	5.6	3.6	2.5	1.8	1.4	R14
R15	2,869.0	489.6	204.0	76.5	40.8	23.0	14.8	12.8	9.7	7.7	4.9	3.4	2.4	1.6	R15
R16	3,226.0	550.6	229.4	86.0	45.9	25.9	16.7	14.3	10.9	8.6	5.5	3.8	2.7	1.8	R16
R17	3,876.4	661.6	275.7	103.4	55.1	31.1	20.0	17.2	13.1	10.3	6.6	4.6	3.3	2.2	R17
R18	4,660.6	795.4	331.4	124.3	66.3	37.4	24.1	20.7	15.8	12.4	8.0	5.5	3.9	2.6	R18
R19	4,973.0	848.7	353.6	132.6	70.7	39.9	25.7	22.1	16.8	13.3	8.5	5.9	4.3	3.3	R19
R20	5,757.2	982.6	409.4	153.5	81.9	46.2	29.8	25.6	19.5	15.4	9.8	6.8	5.0	3.8	R20
R21	6,949.4	1,186.0	494.2	185.3	98.8	55.8	35.9	30.9	23.5	18.5	11.9	8.2	6.1	4.6	R21
R22	7,650.7	1,305.7	544.1	204.0	108.8	61.4	39.6	34.0	25.9	20.4	13.1	9.1	6.7	5.1	R22
R23	8,798.3	1,501.6	625.7	234.6	125.1	70.7	45.5	39.1	29.8	23.5	15.0	10.4	7.7	5.9	R23
R24	10,073.4	1,719.2	716.3	268.6	143.3	80.9	52.1	44.8	34.1	26.9	17.2	11.9	8.8	6.7	R24
R25	13,070.0	2,230.6	929.4	348.5	185.9	105.0	67.6	58.1	44.3	34.9	22.3	15.5	11.4	8.7	R25
R26	15,365.2	2,622.3	1,092.6	409.7	218.5	123.4	79.5	68.3	52.0	41.0	26.2	18.2	13.4	10.2	R26
R27	17,724.1	3,024.9	1,260.4	472.6	252.1	142.3	91.7	78.8	60.0	47.3	30.2	21.0	15.4	11.8	R27
R28	20,083.1	3,427.5	1,428.1	535.5	285.6	161.3	103.9	89.3	68.0	53.6	34.3	23.8	17.5	13.4	R28
R29	21,804.5	3,721.3	1,550.5	581.5	310.1	175.1	112.8	96.9	73.8	58.1	37.2	25.8	19.0	14.5	R29
R30	22,378.3	3,819.2	1,591.3	596.8	318.3	179.7	115.7	99.5	75.8	59.7	38.2	26.5	19.5	14.9	R30
Temperature Correction Factors for Carbon Steel Structural Shapes															
Deg. C	-30 to 40	100	150	200	250	300	350								
η_f	1.00	0.91	0.89	0.86	0.82	0.76	0.73								

Table 6-B10 Pressure Capacity Table for Carbon Steel Reinforcements Spaced at 4000 mm Intervals**NOTES:**

- Stiffener Types refer to a classification system which groups various structural shapes having approximately equivalent physical characteristics, see Table 8-D for a complete listing of the available structural shapes and the physical characteristics assigned to each reinforcement class.
- Each column lists pressure capacity in kPa for a panel width (W) in mm. The pressure capacity of each reinforcement class is based on a stiffener maximum allowable stress of ($\eta_f \times F_y / 1.5 = 166$ MPa) and a corresponding deflection of not more than ($W/360$).
- The pressure capacity values listed in this table can be taken as positive or negative as required by the intended application, and are based on a yield strength of 249 MPa characteristic of ISO 4951 Structural Quality Hot-rolled Steel. For un-fixed stiffeners the pressure capacity values must be reduced by multiplying by a factor of 0.80.
- While the pressure capacities listed are intended for systems operating at ambient temperatures they may be adjusted for higher temperatures by multiplying by the appropriate value of (η_f), up to a maximum operating temperature of (204° C) for galvanized steel products and (343° C) for carbon steel.

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CS-249 MPa
Spacing
Re Capacity

STRUCTURAL GR. CS-249 MPa
Table 6-B11 5000 mm Spacing
Fixed Stiffener Pressure Capacity

6.106

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Stiffener Type	Panel Width, mm													Stiffener Type	
	400	500	600	800	1000	1250	1500	1600	1800	2000	2500	3000	3500	4000	
R1	19.8	10.1	2.2	0.6	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	R1
R2	45.9	23.5	5.2	1.3	0.6	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	R2
R3	83.5	42.8	9.5	2.4	1.1	0.6	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	R3
R4	121.1	62.0	13.8	3.4	1.7	0.9	0.6	0.5	0.3	0.2	0.1	0.1	0.0	0.0	R4
R5	191.3	97.9	21.8	5.4	2.6	1.4	0.9	0.7	0.5	0.3	0.2	0.1	0.1	0.0	R5
R6	251.2	128.6	28.6	7.1	3.4	1.8	1.1	1.0	0.7	0.6	0.3	0.2	0.1	0.1	R6
R7	360.9	184.8	41.1	10.3	4.9	2.6	1.6	1.4	1.1	0.8	0.4	0.2	0.1	0.1	R7
R8	481.4	246.5	54.8	13.7	6.6	3.5	2.2	1.9	1.4	1.1	0.6	0.3	0.2	0.1	R8
R9	669.4	342.8	76.2	19.0	9.1	4.9	3.0	2.6	2.0	1.5	0.9	0.5	0.3	0.2	R9
R10	822.5	421.1	93.6	23.4	11.2	6.0	3.7	3.2	2.4	1.9	1.1	0.8	0.5	0.3	R10
R11	1,236.9	633.3	140.7	35.2	16.9	9.0	5.6	4.8	3.6	2.8	1.7	1.2	0.7	0.5	R11
R12	1,542.9	790.0	175.5	43.9	21.1	11.2	7.0	6.0	4.5	3.5	2.1	1.5	1.1	0.8	R12
R13	1,855.3	949.9	211.1	52.8	25.3	13.5	8.4	7.2	5.4	4.2	2.5	1.8	1.3	0.9	R13
R14	2,116.7	1,083.7	240.8	60.2	28.9	15.4	9.6	8.2	6.2	4.8	2.9	2.0	1.5	1.1	R14
R15	2,869.0	1,468.9	326.4	81.6	39.2	20.9	13.1	11.1	8.4	6.5	3.9	2.7	1.9	1.3	R15
R16	3,226.0	1,651.7	367.1	91.8	44.0	23.5	14.7	12.5	9.4	7.3	4.4	3.1	2.1	1.4	R16
R17	3,876.4	1,984.7	441.0	110.3	52.9	28.2	17.6	15.0	11.3	8.8	5.3	3.7	2.6	1.8	R17
R18	4,660.6	2,386.2	530.3	132.6	63.6	33.9	21.2	18.1	13.6	10.6	6.4	4.4	3.1	2.1	R18
R19	4,973.0	2,546.2	565.8	141.5	67.9	36.2	22.6	19.3	14.5	11.3	6.8	4.7	3.5	2.7	R19
R20	5,757.2	2,947.7	655.0	163.8	78.6	41.9	26.2	22.3	16.8	13.1	7.9	5.5	4.0	3.1	R20
R21	6,949.4	3,558.1	790.7	197.7	94.9	50.6	31.6	27.0	20.3	15.8	9.5	6.6	4.8	3.7	R21
R22	7,650.7	3,917.2	870.5	217.6	104.5	55.7	34.8	29.7	22.3	17.4	10.4	7.3	5.3	4.1	R22
R23	8,798.3	4,504.7	1,001.1	250.3	120.1	64.1	40.0	34.1	25.7	20.0	12.0	8.3	6.1	4.7	R23
R24	10,073.4	5,157.6	1,146.1	286.5	137.5	73.4	45.8	39.1	29.4	22.9	13.8	9.6	7.0	5.4	R24
R25	13,070.0	6,691.8	1,487.1	371.8	178.4	95.2	59.5	50.7	38.1	29.7	17.8	12.4	9.1	7.0	R25
R26	15,365.2	7,867.0	1,748.2	437.1	209.8	111.9	69.9	59.6	44.8	35.0	21.0	14.6	10.7	8.2	R26
R27	17,724.1	9,074.8	2,016.6	504.2	242.0	129.1	80.7	68.7	51.7	40.3	24.2	16.8	12.3	9.5	R27
R28	20,083.1	10,282.6	2,285.0	571.3	274.2	146.2	91.4	77.9	58.6	45.7	27.4	19.0	14.0	10.7	R28
R29	21,804.5	11,163.9	2,480.9	620.2	297.7	158.8	99.2	84.6	63.6	49.6	29.8	20.7	15.2	11.6	R29
R30	22,378.3	11,457.7	2,546.2	636.5	305.5	163.0	101.8	86.8	65.3	50.9	30.6	21.2	15.6	11.9	R30
Temperature Correction Factors for Carbon Steel Structural Shapes															
Deg. C	-30 to 40	100	150	200	250	300	350								
η_f	1.00	0.91	0.89	0.86	0.82	0.76	0.73								

Table 6-B11 Pressure Capacity Table for Carbon Steel Reinforcements Spaced at 5000 mm Intervals

NOTES:

- Stiffener Types refer to a classification system which groups various structural shapes having approximately equivalent physical characteristics, see Table 8-D for a complete listing of the available structural shapes and the physical characteristics assigned to each reinforcement class.
- Each column lists pressure capacity in kPa for a panel width (W) in mm. The pressure capacity of each reinforcement class is based on a stiffener maximum allowable stress of ($\eta_f \times F_y / 1.5 = 166$ MPa) and a corresponding deflection of not more than ($W/360$).
- The pressure capacity values listed in this table can be taken as positive or negative as required by the intended application, and are based on a yield strength of 249 MPa characteristic of ISO 4951 Structural Quality Hot-rolled Steel. For un-fixed stiffeners the pressure capacity values must be reduced by multiplying by a factor of 0.80.
- While the pressure capacities listed are intended for systems operating at ambient temperatures they may be adjusted for higher temperatures by multiplying by the appropriate value of (η_f), up to a maximum operating temperature of (204° C) for galvanized steel products and (343° C) for carbon steel.

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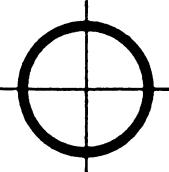
Stiffener Type	Panel Width, mm														Stiffener Type
	400	500	600	800	1000	1250	1500	1600	1800	2000	2500	3000	3500	4000	
R1	19.8	10.1	5.9	0.7	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	R1
R2	45.9	23.5	13.6	1.6	0.6	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	R2
R3	83.5	42.8	24.7	3.0	1.2	0.5	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	R3
R4	121.1	62.0	35.9	4.3	1.7	0.8	0.5	0.4	0.3	0.2	0.1	0.1	0.0	0.0	R4
R5	191.3	97.9	56.7	6.8	2.7	1.3	0.8	0.7	0.4	0.3	0.1	0.1	0.0	0.0	R5
R6	251.2	128.6	74.4	8.9	3.6	1.8	1.1	0.9	0.7	0.5	0.2	0.1	0.1	0.1	R6
R7	360.9	184.8	106.9	12.8	5.1	2.5	1.5	1.3	1.0	0.7	0.3	0.2	0.1	0.1	R7
R8	481.4	246.5	142.6	17.1	6.8	3.4	2.0	1.7	1.3	1.0	0.5	0.3	0.2	0.1	R8
R9	669.4	342.8	198.4	23.8	9.5	4.7	2.8	2.4	1.8	1.4	0.8	0.4	0.3	0.2	R9
R10	822.5	421.1	243.7	29.2	11.7	5.8	3.5	2.9	2.2	1.7	1.0	0.6	0.4	0.3	R10
R11	1,236.9	633.3	366.5	44.0	17.6	8.7	5.2	4.4	3.3	2.5	1.5	1.0	0.6	0.4	R11
R12	1,542.9	790.0	457.2	54.9	21.9	10.8	6.5	5.5	4.1	3.1	1.8	1.2	0.9	0.7	R12
R13	1,855.3	949.9	549.7	66.0	26.4	13.0	7.8	6.6	4.9	3.8	2.2	1.5	1.1	0.7	R13
R14	2,116.7	1,083.7	627.2	75.3	30.1	14.8	8.9	7.5	5.6	4.3	2.5	1.7	1.2	0.9	R14
R15	2,869.0	1,468.9	850.1	102.0	40.8	20.1	12.1	10.2	7.6	5.8	3.4	2.3	1.6	1.1	R15
R16	3,226.0	1,651.7	955.9	114.7	45.9	22.6	13.6	11.5	8.5	6.6	3.9	2.5	1.8	1.2	R16
R17	3,876.4	1,984.7	1,148.6	137.8	55.1	27.1	16.3	13.8	10.2	7.9	4.6	3.1	2.2	1.5	R17
R18	4,660.6	2,386.2	1,380.9	165.7	66.3	32.6	19.6	16.6	12.3	9.5	5.6	3.7	2.6	1.7	R18
R19	4,973.0	2,546.2	1,473.5	176.8	70.7	34.8	21.0	17.7	13.1	10.1	6.0	3.9	2.9	2.2	R19
R20	5,757.2	2,947.7	1,705.8	204.7	81.9	40.3	24.3	20.5	15.2	11.7	6.9	4.5	3.3	2.6	R20
R21	6,949.4	3,558.1	2,059.1	247.1	98.8	48.7	29.3	24.7	18.3	14.1	8.3	5.5	4.0	3.1	R21
R22	7,650.7	3,917.2	2,266.9	272.0	108.8	53.6	32.2	27.2	20.2	15.5	9.2	6.0	4.4	3.4	R22
R23	8,798.3	4,504.7	2,606.9	312.8	125.1	61.6	37.1	31.3	23.2	17.9	10.5	7.0	5.1	3.9	R23
R24	10,073.4	5,157.6	2,984.7	358.2	143.3	70.5	42.4	35.8	26.5	20.5	12.1	8.0	5.8	4.5	R24
R25	13,070.0	6,691.8	3,872.6	464.7	185.9	91.5	55.1	46.5	34.4	26.6	15.7	10.3	7.6	5.8	R25
R26	15,365.2	7,867.0	4,552.6	546.3	218.5	107.6	64.7	54.6	40.5	31.2	18.4	12.1	8.9	6.8	R26
R27	17,724.1	9,074.8	5,251.6	630.2	252.1	124.1	74.7	63.0	46.7	36.0	21.2	14.0	10.3	7.9	R27
R28	20,083.1	10,282.6	5,950.6	714.1	285.6	140.6	84.6	71.4	52.9	40.8	24.1	15.9	11.7	8.9	R28
R29	21,804.5	11,163.9	6,460.6	775.3	310.1	152.7	91.9	77.5	57.4	44.3	26.1	17.2	12.7	9.7	R29
R30	22,378.3	11,457.7	6,630.6	795.7	318.3	156.7	94.3	79.6	58.9	45.5	26.8	17.7	13.0	9.9	R30
Temperature Correction Factors for Carbon Steel Structural Shapes															
Deg. C	-30 to 40	100	150	200	250	300	350								
η_f	1.00	0.91	0.89	0.86	0.82	0.76	0.73								

Table 6-B12 Pressure Capacity Table for Carbon Steel Reinforcements Spaced at 6000 mm Intervals**NOTES:**

- Stiffener Types refer to a classification system which groups various structural shapes having approximately equivalent physical characteristics, see Table 8-D for a complete listing of the available structural shapes and the physical characteristics assigned to each reinforcement class.
- Each column lists pressure capacity in kPa for a panel width (W) in mm. The pressure capacity of each reinforcement class is based on a stiffener maximum allowable stress of ($\eta_f \times F_y / 1.5 = 166$ MPa) and a corresponding deflection of not more than ($W/360$).
- The pressure capacity values listed in this table can be taken as positive or negative as required by the intended application, and are based on a yield strength of 249 MPa characteristic of ISO 4951 Structural Quality Hot-rolled Steel. For un-fixed stiffeners the pressure capacity values must be reduced by multiplying by a factor of 0.80.
- While the pressure capacities listed are intended for systems operating at ambient temperatures they may be adjusted for higher temperatures by multiplying by the appropriate value of (η_f), up to a maximum operating temperature of (204° C) for galvanized steel products and (343° C) for carbon steel.

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Allowable Compressive Loads in Kilo Newtons										
Nom. Pipe Dia., mm	15	20	25	32	40	50	65	80	100	
Wall Thickness, mm	2.4	2.4	2.9	3.1	3.1	3.3	3.75	4.0	4.25	
Mass, kg/m	1.12	1.44	2.19	2.99	3.45	4.61	6.64	8.31	11.47	
F _y , MPa	249 MPa									
Unbraced Column Height, mm	400	17.1	23.6	37.3	52.0	61.0	83.0	120	150	210
	600	14.0	20.9	34.4	49.8	58.0	80.0	110	150	200
	800	10.3	17.7	30.9	46.5	55.0	77.0	110	140	200
	1000	6.7	13.9	27.0	42.7	52.0	74.0	110	140	200
	1250	4.2	9.2	21.3	37.5	47.3	69.0	100	130	190
	1500		6.3	15.3	31.6	41.9	64.0	100	130	190
	1600		5.6	13.4	29.1	39.6	62.0	100	130	190
	1800			10.6	23.7	34.7	58.0	95.0	120	180
	2000			8.6	19.2	29.4	53.0	90.0	120	180
	2500				12.3	18.8	39.6	77.0	100	170
	3000					13.0	27.5	62.0	94.0	150
	3500						20.2	46.6	78.0	140
	4000						15.5	35.6	61.0	120
Properties										
Area A, cm ²	1.42	1.84	2.79	3.81	4.39	5.88	8.45	10.58	14.58	
I, cm ⁴	0.64	1.37	3.29	7.34	11.24	23.66	54.45	93.98	217.57	
r, mm	6.72	8.65	10.87	13.88	16.00	20.08	25.40	29.82	38.65	
Internal Pipe Support Load Reduction Factors Based on Temperature										
Deg. C	-30 TO 40	100	150	200	250	300	350	400	500	
η_f	1.00	0.91	0.89	0.86	0.82	0.76	0.73	0.69	0.62	
η_e	1.00	0.96	0.96	0.94	0.93	0.91	0.89	0.87	0.71	

Table 6-C Internal Carbon Steel Pipe Support – Allowable Load Table

NOTES:

- Selections in blank area of the table have a $KI/r > 200$ and are not generally recommended for internal duct supports.
- Maximum column loading is assumed to be concentric with the columns center of gravity; the effective column length factor ($K = 1.0$) represents typical end conditions for duct support applications.
- Apply yield strength reduction factor (η_f) to table values above heavy line, and Modulus reduction factor (η_e) to values below the heavy line.
- Pipe is assumed to be medium series ISO 65 welded seam carbon steel pipe suitable for screwing per ISO 7-1. Other carbon steel pipe with same nominal diameter but greater section properties (A and I) can be assumed to be satisfactory for the above listed compressive loads.

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STRUCTURAL GR CS - 249 MPa
Table 6-D - Stiffener Data

Stiffener Type	S (Min)	I (Min)	Stiffener Size (mm)	Stiffener Description	Weight kg/m	S cm ³	I cm ⁴
R-1	0.51	0.92	L 25 × 25 × 4	Equal Leg Angle	1.45	0.58	1.0
			L 30 × 30 × 5	Equal Leg Angle	2.18	1.04	2.2
			UPN 30 × 15	European Standard Channel	1.74	1.69	2.5
			25 × 8	Bar	1.61	0.83	1.0
			25 × 10	Bar	2.01	1.04	1.3
R-2	1.18	2.50	L 35 × 35 × 4	Equal Leg Angle	2.10	1.18	3.0
			L 40 × 40 × 4	Equal Leg Angle	2.42	1.56	4.5
			L 45 × 45 × 4	Equal Leg Angle	2.74	1.97	6.4
			UPN 30 × 15 (30 × 15 × 4/4.5)	European Standard Channel	1.74	1.69	2.5
R-3	2.15	5.79	L 45 × 45 × 5	Equal Leg Angle	3.38	2.43	7.8
			L 50 × 50 × 5	Equal Leg Angle	3.77	3.06	11.0
			50 × 6	Bar	2.41	2.50	6.3
R-4	3.11	11.32	L 50 × 50 × 6	Equal Leg Angle	4.47	3.61	12.8
			L 50 × 50 × 7	Equal Leg Angle	5.15	4.16	14.6
R-5	4.92	17.32	L 60 × 60 × 6	Equal Leg Angle	5.42	5.29	22.8
			L 60 × 60 × 8	Equal Leg Angle	7.09	6.88	29.1
			75 × 6	Bar	3.62	5.63	21.1
R-6	6.46	29.26	L 65 × 65 × 7	Equal Leg Angle	6.83	7.18	33.4
			L 70 × 70 × 6	Equal Leg Angle	6.38	7.28	36.9
			L 70 × 70 × 7	Equal Leg Angle	7.38	8.43	42.4
			75 × 8	Bar	4.83	7.50	28.1
			75 × 10	Bar	6.04	9.38	35.2
R-7	9.28	40.96	L 70 × 70 × 9	Equal Leg Angle	9.34	10.63	52.6
			L 75 × 75 × 7	Equal Leg Angle	7.94	9.69	52.4
			L 75 × 75 × 8	Equal Leg Angle	9.03	10.97	58.9
			L 80 × 80 × 6	Equal Leg Angle	7.34	9.57	55.8
			100 × 6	Bar	4.83	10.00	50.0
R-8	12.37	63.68	L 80 × 65 × 8	Unequal Leg Angle	8.66	12.31	68.1
			L 80 × 65 × 10	Unequal Leg Angle	10.70	15.08	82.2
			L 90 × 60 × 6	Unequal Leg Angle	6.82	11.73	71.7
			L 90 × 60 × 8	Unequal Leg Angle	8.96	15.34	92.5
			L 100 × 50 × 6	Unequal Leg Angle	6.85	13.78	89.7
			L 80 × 80 × 8	Equal Leg Angle	9.66	12.60	72.3
			L 80 × 80 × 10	Equal Leg Angle	11.90	15.49	87.5
			L 90 × 90 × 7	Equal Leg Angle	9.60	14.12	92.5
			90 × 12	Bar	8.69	16.20	72.9
R-9	17.21	92.40	L 90 × 90 × 9	Equal Leg Angle	12.20	17.93	115.8
			L 100 × 100 × 8	Equal Leg Angle	12.20	19.94	144.8
			L 100 × 50 × 8	Unequal Leg Angle	8.99	18.10	116.0
			L 100 × 50 × 10	Unequal Leg Angle	11.10	22.27	141.0
			L 100 × 65 × 7	Unequal Leg Angle	8.77	16.69	113.0
			L 100 × 65 × 9	Unequal Leg Angle	11.10	21.11	141.0

Table 6-D Stiffener Data