

## IMPACT RESISTANCE

The minimum impact resistance values for the conduit shall be as shown in the table below when tested in accordance with ASTM D2444.

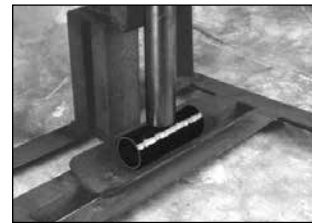
Nominal Size	At 73.4°F (23°C)				At 32°F (0°C)			
	Impact Resistance lbs. ft. (Nm)				Impact Resistance lbs. ft. (Nm)			
	SW	MW	HW	XW	SW	MW	HW	XW
¾	20 (27)	-- --	-- --	150 (202)	20 (27)	-- --	-- --	150 (202)
1	25 (34)	-- --	-- --	400 (540)	25 (34)	-- --	-- --	400 (540)
1¼	30 (41)	-- --	-- --	400 (540)	30 (41)	-- --	-- --	400 (540)
1½	35 (47)	-- --	-- --	500 (675)	35 (47)	-- --	-- --	500 (675)
2	40 (54)	-- --	-- --	550 (742)	40 (54)	-- --	-- --	550 (742)
2½	55 (75)	-- --	-- --	600 (810)	55 (75)	-- --	-- --	600 (810)
3	70 (95)	-- --	-- --	700 (945)	70 (95)	-- --	-- --	700 (945)
3½	80 (108)	-- --	-- --	850 (1,150)	80 (108)	-- --	-- --	850 (1,150)
4	85 (115)	-- --	120 (163)	1,000 (1,350)	85 (115)	-- --	120 (163)	1,000 (1,350)
5	110 (149)	140 (190)	160 (217)	1,200 (1,620)	110 (149)	140 (190)	160 (217)	1,200 (1,620)
6	130 (176)	160 (217)	200 (271)	1,300 (1,755)	130 (179)	160 (217)	200 (271)	1,300 (1,755)



For high impact situations as well as during cold weather, PVC can shatter and/or flatten.



For high impact, steel conduit will collapse and can pinch the cable. This will make repair of damaged conduit more difficult.



X-wall conduit has the highest impact value of all conduit materials available. If impacted, it will flex back close to its original diameter. SW, MW and HW will also flex back similarly after impact. They will not shatter.

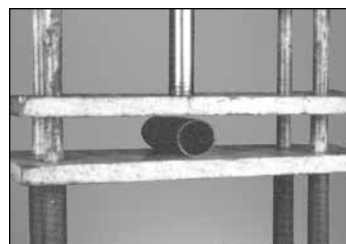
## STIFFNESS

The minimum conduit stiffness at five percent deflection for all sizes of conduit shall not be less than the values given in table below when tested in accordance with ASTM D2412

Pipe Stiffness (PS) = (F/ΔY)								
Nominal Size	At 73.4°F (23°C)				At 32°F (0°C)			
	lbf/in <sup>2</sup> (MPa)				lbf/in <sup>2</sup> (MPa)			
	SW	MW	HW	XW	SW	MW	HW	XW
¾	1,500 (10.3)	--	--	2,500 (17.5)	1,500 (10.3)	--	--	2,500 (17.5)
1	1,200 (8.3)	--	--	2,400 (16.8)	1,200 (8.3)	--	--	2,400 (16.8)
1¼	850 (5.9)	--	--	2,100 (14.7)	850 (5.9)	--	--	2,100 (14.7)
1½	600 (4.1)	--	--	2,000 (14)	600 (4.1)	--	--	2,000 (14)
2	320 (2.2)	--	--	1,300 (9.0)	320 (2.2)	--	--	1,300 (9.0)
2½	200 (1.4)	--	--	800 (5.6)	200 (1.4)	--	--	800 (5.6)
3	140 (1.0)	--	--	600 (4.1)	140 (1.0)	--	--	600 (4.1)
3½	85 (0.6)	--	--	450 (3.1)	85 (0.6)	--	--	450 (3.1)
4	50 (0.3)	--	130 (0.7)	250 (1.7)	50 (0.3)	--	130 (0.7)	250 (1.7)
5	40 (0.3)	75 (0.5)	90 (0.6)	180 (1.2)	40 (0.3)	75 (0.5)	90 (0.6)	180 (1.2)
6	30 (0.2)	55 (0.4)	65 (0.4)	150 (1.0)	30 (0.2)	55 (0.4)	65 (0.4)	150 (1.0)



**PVC Conduit**  
PVC conduit will stay compressed if it is crushed. (Same for steel conduit.)



**Fiberglass Conduit**  
Epoxy Fiberglass conduit will flex back to almost its original shape after crushing.