

Architectural Windows and Window Wall

ALL Series

I-Value Required (in⁴)

Mullion Spacing

	Inches	24	30	36	42	48	54	60	66	72
M u l l i o n H e i g h t	42	0.0025	0.0028	0.0031	0.0032	0.0036	0.0041	0.0045	0.0050	0.0054
	48	0.0038	0.0045	0.005	0.0053	0.0054	0.0060	0.0067	0.0074	0.0081
	54	0.0055	0.0066	0.0074	0.0081	0.0085	0.0086	0.0096	0.0105	0.0115
	60	0.0077	0.0093	0.0106	0.0117	0.0125	0.0130	0.0131	0.0144	0.0158
	66	0.0103	0.0125	0.0145	0.0161	0.0175	0.0184	0.0190	0.0192	0.0210
	72	0.0136	0.0165	0.0192	0.0215	0.0235	0.0251	0.0263	0.0270	0.0272
	78	0.0173	0.0212	0.0248	0.028	0.0308	0.0331	0.035	0.0364	0.0372
	84	0.0218	0.0267	0.0313	0.0356	0.0393	0.0426	0.0454	0.0476	0.0491
	90	0.0277	0.0346	0.0415	0.0484	0.0554	0.0623	0.0692	0.0761	0.0831
	96	0.0336	0.0420	0.0504	0.0588	0.0672	0.0756	0.0840	0.0924	0.1008
	102	0.0403	0.0504	0.0605	0.0705	0.0806	0.0907	0.1008	0.1108	0.1209
	108	0.0478	0.0598	0.0718	0.0837	0.0957	0.1076	0.1196	0.1316	0.1435
	114	0.0563	0.0703	0.0844	0.0985	0.1125	0.1266	0.1407	0.1547	0.1688
	120	0.0656	0.082	0.0984	0.1148	0.1313	0.1477	0.1641	0.1805	0.1969
	132	0.0873	0.1092	0.1310	0.1529	0.1747	0.1965	0.2184	0.2402	0.2620
	144	0.1134	0.1418	0.1701	0.1985	0.2268	0.2552	0.2855	0.3119	0.3402
	156	0.1428	0.1785	0.21425	0.2499	0.2856	0.3213	0.3570	0.3927	0.4284
	168	0.1820	0.2275	0.2730	0.3184	0.3639	0.4094	0.4549	0.5004	0.5459
180	0.2278	0.2848	0.3417	0.3987	0.4556	0.5126	0.5695	0.6265	0.6834	
192	0.2809	0.3511	0.4213	0.4915	0.5617	0.6320	0.7022	0.7724	0.8426	
204	0.3417	0.4271	0.5125	0.5979	0.6834	0.7688	0.8542	0.9396	1.0250	
216	0.4108	0.5135	0.6162	0.7189	0.8216	0.9242	1.0269	1.1296	1.2323	
228	0.4887	0.6109	0.7331	0.8552	0.9774	1.0996	1.2218	1.3439	1.4661	
240	0.5760	0.7200	0.8640	1.0080	1.1520	1.2960	1.4400	1.5840	1.7280	

Factors are for a one psf windload. Multiply this factor by the actual windload to obtain a required 'I' value.

Example:

To determine the 'I' Value for 54" mullion width, 168" mullion height, @ 36 psf windload:

Calculate : $(0.4094) * (36 \text{ psf}) = 14.738^4 \text{ in}$

Notes: Trapezoidal loading used for mullions 84" or less.

Mullions over 168" are designed for L/240 + 1/4" allowable deflection.

Mullions under 168" are designed for L/175 allowable deflection.

Based on E=10,000,000 psi (Aluminum)

