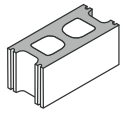


CONCRETE MASONRY UNITS SPECIFICATIONS - CAN3 - A165

PHYSICAL PROPERTIES

FACET	SYMBOL	PROPERTY		
First		**Solid Content**		
	H*	Hollow		
	SS*	Semi-solid (as defined)		
	FS*	Full solid (as defined)		
Second		Minimum specified compressive strength calculated on average net cross-sectional area of the unit, MPa†		
	10	10		
*	15	15		
	20	20		
	30	30		
Third		**Concrete Type**		
		Density kg/m³	**Absorption (maximum), kg/m³**	
*	A	Over 2000	175	
	B	1800-2000	200	
	C	1700-1800	225	
	D	Less than 1700	300	
	N	No limits	No limits	
Fourth		**Maximum moisture content, % of total absorption (average of 5 specimens)**		
			Moisture content	
			RH Over	**RH Under**
		Linear shrinkage, %	75% §	75% §
*	M	Less than 0.03	45	40
		0.03-0.045	40	35
		Over 0.045	35	30
	O‡	No limits	No limits	

*Most commonly used.

When specifying concrete masonry units under CAN3-A165, it is necessary to classify the block by their physical properties, using the four facet system in the table above.

First Facet
H defines Hollow Block (50% solid)
SS defines Semi Solid Block (75% solid)
FS defines Solid Block (100% solid)

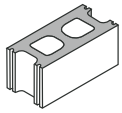
Second Facet
Defines compressive strength

Third Facet
Defines density and water absorption

Fourth Facet
Defines moisture content

Example:
Type H/15/A/M = Hollow, 15 MPa, regular weight
Type SS/15/A/M = Semi Solid, 15MPa, regular weight
Type FS/20/A/M = Full Solid, 20 MPa, regular weight

PO BOX 2130, LANTZ, NOVA SCOTIA, CANADA, B2S 3G4
TEL: 902.883.2201 • FAX: 902.883.1273 • EMAIL: salesinfo@shawbrick.ca



CONCRETE MASONRY UNITS - TECHNICAL INFORMATION

Dimensions and Wall Properties					
Modular size mm	100	150	200	250	300
Actual overall width mm	90	140	190	240	290
Minimum face shell thickness mm	26	26	32	35	38
Minimum web thickness mm	26	26	26	28	32
End flange width mm (Note 1)	n/a	n/a	50	50	50
Equivalent thickness mm	66	80	103	121	144
Percentage solid	74	57	54	51	50
Approximate mass of wall in place (Note 2) normal weight kg/m^2	140	170	215	255	300
Fire rating hours (Note 3) concrete type S or N (minutes)	54	66	99	130	183
Sound transmission class STC (Note 4 normal weight (Note 2) db	45	47	51	53	56

Notes:

Figures given for mass of wall and sound transmission are given as a guide only.

1. Standard 100mm units available with plain ends only.
2. Densities assumed: normal weight 2100 kg/m^3 (131 lb/cu ft).
3. Fire ratings taken from the National Building Code Supplement No. 2, 1988.
   Note that some of the aggregate types listed above are not available in all areas of Canada.
4. STC ratings estimated from NCMA publication TEK 9 for walls painted on both sides.

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