Calculated Fire-Resistance Ratings for Ungrouted or Partially Grouted Single Wythe Masonry Walls Constructed of Standard Concrete Block Masonry Units of Typical Solid Contents (Based on Table D-2.1.1 NBCC-2010)**

Wall Standard Size Unit	% Solid Content	Concrete Type	Fire Resistance Rating (min.)
240 mm	53% (Hollow)	Type S or N	149
		Type L ₁ 20S	176
		Type L ₁	195
		Type L ₂ 20S	217
		Type L ₂	240
	78% (Semi-Solid)	Type S or N	240
		Type L ₁ 20S	240
		Type L ₁	240
		Type L ₂ 20S	240
		Type L ₂	240
	100% (Full Solid)	Type S or N	240
		Type L ₁ 20S	240
		Type L ₁	240
		Type L ₂ 20S	240
		Type L ₂	240

^{**}Note hollow or semi-solid units can be considered solid when cores that are not reinforced are filled with grout, sand or vermiculite