TEXTBOOK ERRATA

Date of publication: January 2025

Page Number	Error	Correction
V	Chapter 2 Heading has spelling mistake	Should read as: "**CHAPTER 2 BUILDING DESIGN**"
X	Chapter 13 Heading has spelling mistake	Should read as: "**CHAPTER 13 DESIGN OF LOADBEA~~GR~~ING SINGLE-STOREY MASONRY BUILDINGS**"
649	Equation 10.31 has unnecessary bracket }	Delete bracket next to equation number 10.31~~}~~
650	Equation 10.32 is missing variable θ	Equation 10.32 should appear as $Q_{I_{a.e.}} = \left(M_{f_v}\right)(x)\left(\theta_y\right)$
757	Text related to Table 12.1 can be confusing to interpret the dimensional limits for movement joint spacing.	See Corrected text below: **2. Crack Control with Movement Joints and Horizontal Reinforcement**. Based on the recommendations from NCMA12.13 it is possible to use a combination of reinforcement with regularly spaced movement joints to successfully mitigate shrinkage cracks that may detract from the overall appearance. By providing the minimum reinforcement summarized in Table 12.1, movement joints should not have a spacing that exceeds smj = 7.6 m when the height of the wall is greater than 3.0 m. ~~For wall heights less than this, smj should be limited to length, ℓ divided by 2.5.~~ For wall heights less than this, s_{mj} should be limited to the height of the wall multiplied by 2.5. This will ensure a length to height aspect ratio of at most 2.5 is maintained for portions of wall between movement joints. These limits are adapted from NCMA based on Canadian design values (e.g., use of effective mortared area for effective area calculations, minimum reinforcement ratio of 0.067%, standard metric dimensions, etc.). The reinforcement limits provided in Table 12.1 for partially-grouted masonry also assume a relatively small total relative movement in the unit. Units and locations where higher levels of total linear drying shrinkage, shrinkage due to carbonation, and thermal shrinkage, are likely to

<table>
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<td>occur, may require a smaller spacing of movement joints.[12.13] These values are provided here as a guideline based on typical units available in Canada.

Table 12.1 Suggested Maximum Movement Joint Spacing in Partially-Grouted Concrete Block Masonry Walls (Interior Construction).
<table>
<tr><td></td><td colspan="6">Maximum Spacing between Movement Joints, s_{mj}[a]</td></tr>
<tr><td></td><td>4.8 m – 6.6 m[b]</td><td colspan="5"><s>7.6 m ≤ ℓ ÷ 2.5</s> min {7.6 m ; h*2.5}</td></tr>
<tr><td></td><td colspan="6">Horizontal Reinforcement Required[c]</td></tr>
<tr><td>Unit Size</td><td>None</td><td>BJR</td><td>BJR+BB</td><td>HD-BJR</td><td>10M</td><td>15M</td></tr>
<tr><td>15 cm</td><td>-</td><td>600 mm</td><td>600 mm</td><td>600 mm</td><td>2,400 mm</td><td>2,400 mm</td></tr>
<tr><td>20 cm</td><td>-</td><td>400 mm</td><td>600 mm</td><td>600 mm</td><td>1,600 mm</td><td>2,400 mm</td></tr>
<tr><td>25 cm</td><td>-</td><td>400 mm</td><td>600 mm</td><td>600 mm</td><td>1,400 mm</td><td>2,400 mm</td></tr>
<tr><td>30 cm</td><td>-</td><td>200 mm</td><td>600 mm</td><td>600 mm</td><td>1,200 mm</td><td>2,400 mm</td></tr>
</table>
[a]These limits are intended to be general guidelines adapted from various historical empirical and modern rational methods of analysis converted for use with the Canadian design method. Designers are cautioned against applying these limits for all possible applications and should carefully consider the type of unit being used, the conditions experienced during construction, and the expected conditions during the useful life of the building. In many cases designers may opt for a much higher or much lower spacing depending on the aforementioned variables.
[b]When using units that meet the moisture-controlled specifications in CSA A165.1 and expected in-situ relative humidity levels are maintained between 50-75% then s_{mj} can be taken as a maximum of 6.6 m. Otherwise, when the expected in-situ relative humidity is expected to be <s>low</s> below 50% then s_{mj} should not be taken greater than 4.8 m.
[c]The spacings provided are based on the properties given in Appendix B. Where: BJR is Standard Bed Joint Reinforcement, BJR+BB is Standard Bed Joint Reinforcement where a bond beam with at least one 10M bar is placed at a spacing not exceeding 2,400 mm, and HD-BJR is Heavy Duty Bed Joint Reinforcement.</td>
</tr>
<tr>
<td>809</td>
<td>Equation 13.76 is missing variable ℓ</td>
<td>Equation 13.76 should appear as
$M = M_1 \ell_1$</td>
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<tr>
<td>855</td>
<td>Table B.1 has an incorrect solid content for hollow 140 mm units (this does not affect the</td>
<td>Percent solid for Hollow 140 mm units should be 58%
<table>
<tr><td colspan="8">Average Unit Property Asumptions will Vary by Specific Unit and Manufacturer***</td></tr>
<tr><td rowspan="3">Percent Solid</td><td>Full Solid</td><td>100%</td><td>100%</td><td>100%</td><td>100%</td><td>100%</td></tr>
<tr><td>Semi-Solid</td><td>82%</td><td>80%</td><td>78%</td><td>78%</td><td>78%</td></tr>
<tr><td>Hollow</td><td>73%</td><td><s>52</s>58%</td><td>56%</td><td>53%</td><td>51%</td></tr>
<tr><td></td><td>Grout Density (kg/m^3)</td><td colspan="5">2,350</td></tr>
</table></td>
</tr>
</table>

	calculations in the table)	
858	There were several numerical errors in Table B.5(b) and (d) that occurred during the file transfer process. Corrected values are provided.	**Table B.5(b):**20 cm Concrete Block Units*

Bar Size	Vertical Spacing (mm)	e_k (mm)	20 cm Concrete Masonry Unit Stiffness ($\times 10^9$ N·mm^2/m)							
			15 MPa		20 MPa		25 MPa		30 MPa	
			E_mI_o	E_mI_{cr}	E_mI_o	E_mI_{cr}	E_mI_o	E_mI_{cr}	E_mI_o	E_mI_{cr}
15M	600	45.4	3,510.1	357.4	4,621.2	380.1	5,425.5	393.2	6,229.7	404.1
	800	48.6	3,528.5	283.4	4,633.6	299.5	5,439.2	308.8	6,244.8	316.5
	1,000	50.8	3,546.9	226.7	4,650.0	239.6	5,457.8	247.0	6,265.6	253.2
	1,200	52.5	3,563.0	188.9	4,665.4	199.7	5,475.5	205.9	6,285.5	211.0
20M	600	45.4	3,510.1	480.2	4,621.2	516.7	5,425.5	538.3	6,229.7	556.3
	800	48.6	3,528.5	384.8	4,633.6	411.3	5,439.2	426.7	6,244.8	439.5
	1,000	50.8	3,546.9	307.9	4,650.0	329.0	5,457.8	341.4	6,265.6	351.6
	1,200	52.5	3,563.0	256.6	4,665.4	274.2	5,475.5	284.5	6,285.5	293.0
25M	600	45.4	3,510.1	710.6	4,621.2	751.0	5,425.5	781.2	6,229.7	811.5
	800	48.6	3,528.5	559.9	4,633.6	598.2	5,439.2	626.0	6,244.8	649.8
	1,000	50.8	3,546.9	447.9	4,650.0	478.5	5,457.8	500.8	6,265.6	519.8
	1,200	52.5	3,563.0	373.2	4,665.4	398.8	5,475.5	417.3	6,285.5	433.2

Table B.5(d):30 cm Concrete Block Units*

Bar Size	Vertical Spacing (mm)	e_k (mm)	30 cm Concrete Masonry Unit Stiffness ($\times 10^9$ N·mm^2/m)							
			15 MPa		20 MPa		25 MPa		30 MPa	
			E_mI_o	E_mI_{cr}	E_mI_o	E_mI_{cr}	E_mI_o	E_mI_{cr}	E_mI_o	E_mI_{cr}
15M	600	Not permissible by CSA S304 (10.15.1.1)								
	800									
	1,000									
	1,200									
20M	600	69.9	10,994.3	1,274.3	14,500.6	1,334.7	17,026.4	1,379.0	19,552.1	1,417.0
	800	75.6	10,859.9	1,006.0	14,286.8	1,060.8	16,772.6	1,092.6	19,258.3	1,118.8
	1,000	Not permissible by CSA S304 (10.15.1.1)								
	1,200									
25M	600	69.9	10,994.3	1,989.9	14,500.6	2,050.2	17,026.4	2,095.4	19,552.1	2,140.7
	800	75.6	10,859.9	1,542.7	14,286.8	1,603.0	16,772.6	1,648.2	19,258.3	1,693.5
	1,000	79.9	10,806.9	1,274.3	14,191.7	1,334.7	16,658.9	1,379.0	19,126.2	1,417.0
	1,200	83.2	10,786.4	1,088.8	14,146.1	1,146.5	16,604.0	1,183.2	19,061.9	1,213.6