

ARCHIVE

**NATIONAL BUILDING CODE  
OF CANADA  
1985**

**FIFTH REVISIONS**

Issued by the

Associate Committee on the National Building Code  
National Research Council of Canada  
Ottawa

January 1988

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**Revisions  
to the  
National Building Code of Canada  
1985**

The following revisions to the National Building Code of Canada 1985 have been approved by the Associate Committee on the National Building Code for immediate implementation. Those changes which alter the intent of the document have been made available for prior public review.

In accordance with the ACNBC Policies and Procedures, the documents referenced in Table 2.7.3.A. of the 1985 NBC are updated annually. The First and Fourth Revisions dated January 1986 and January 1987, respectively, included updating of the referenced documents to 30 June 1986. The revisions contained herein include additional updates to 30 June 1987.

| Page  | Reference      | Revision                                                       |
|-------|----------------|----------------------------------------------------------------|
| 21    | 2.7.3.1.       | Change the last line to read "30 June 1987".                   |
| 22-32 | Table 2.7.3.A. | Revise entries in Columns 2 and 3 where applicable as follows: |

| Column 1       | Column 2        |                    | Column 3                                                        |
|----------------|-----------------|--------------------|-----------------------------------------------------------------|
| Issuing Agency | Document Number |                    | Title of Document (as revised) (1)                              |
|                | Existing Number | Revised Number (1) |                                                                 |
| ASTM           | A525-86 (2)     | A525-87            |                                                                 |
| ASTM           | C444M-1980      | C444M-87           |                                                                 |
| ASTM           | C700-78a(1983)  | C700-86            |                                                                 |
| CGA            | CAN1-B149.2-M80 | CAN/CGA-B149.2-M86 | Propane Installation Code                                       |
| CGSB           | 7-GP-1M-1980    | CAN/CGSB-7.1-M86   | Cold Formed Steel Framing Components                            |
| CGSB           | CAN2-19.13-M82  | CAN/CGSB-19.13-M87 |                                                                 |
| CGSB           | 34-GP-22M-1976  | CAN/CGSB-34.22-M87 |                                                                 |
| CGSB           | 37-GP-18Ma-1984 | 37-GP-18Ma-1985    | Thermal Insulation, Polystyrene, Boards and Pipe Covering       |
| CGSB           | 51-GP-20M-1978  | CAN/CGSB-51.20-M87 |                                                                 |
| CGSB           | 51-GP-25M-1978  | CAN/CGSB-51.25-M87 |                                                                 |
| CSA            | A82.1-M1977     | CAN/CSA-A82.1-M87  | Burned Clay Brick (Solid Masonry Units Made from Clay or Shale) |
| CSA            | B72-1960        | CAN/CSA-B72-M87    | Installation Code for Lightning Protection Systems              |
| CSA            | B182.1-M1983    | B182.1-M87         |                                                                 |

| Column 1       | Column 2          |                    | Column 3                                            |
|----------------|-------------------|--------------------|-----------------------------------------------------|
| Issuing Agency | Document Number   |                    | Title of Document (as revised) (1)                  |
|                | Existing Number   | Revised Number (1) |                                                     |
| CSA            | B365-M1984        | CAN/CSA-B365-M87   | Standard for the Verification of Fire Alarm Systems |
| CSA            | Z32.4-M1978       | CAN/CSA-Z32.4-M86  |                                                     |
| NFPA           | 80-1983           | 80-1986            |                                                     |
| ULC            | S126-M1982        | CAN/ULC-S126-M86   |                                                     |
| ULC            | CAN4-S524-M82     | CAN/ULC-S524-M86   |                                                     |
| ULC            | S531-1978         | CAN/ULC-S531-M87   |                                                     |
| ULC            | CAN4-S537-82      | CAN/ULC-S537-M86   |                                                     |
| ULC            | S610-M1983        | CAN/ULC-S610-M87   |                                                     |
| ULC            | CAN4-S629-M84 (3) | CAN/ULC-S629-M87   |                                                     |

(1) Revised document numbers and titles also apply in the appropriate code references listed in Column 4.

(2) Previously updated in Fourth Revisions dated January 1987.

(3) Previously updated in First Revisions dated January 1986.

| Page | Reference      | Revision                                                                                                              |
|------|----------------|-----------------------------------------------------------------------------------------------------------------------|
| 23   | Table 2.7.3.A. | Delete reference to Article 9.7.2.1. in the seventh entry for CGSB CAN 2-12.8-M76.                                    |
| 25   | Table 2.7.3.A. | Delete third, fourth, fifth and sixth entries for CGSB 63-GP-2M-1976, 63-GP-3M-1976, 63-GP-5M-1976 and 63-GP-6M-1976. |
| 27   | Table 2.7.3.A. | Delete ninth entry for CSA A274-M1980.                                                                                |
| 27   | Table 2.7.3.A. | Add new entry following the eleventh entry.                                                                           |

|          |               |         |          |
|----------|---------------|---------|----------|
| CSA      | CAN3-A440-M84 | Windows | 9.7.2.1. |
| Column 1 | 2             | 3       | 4        |

|    |                |                                                                                 |
|----|----------------|---------------------------------------------------------------------------------|
| 29 | Table 2.7.3.A. | Delete second entry for CSA 0132.1-M1977.                                       |
| 29 | Table 2.7.3.A. | Delete ninth entry for CSA CAN3-0188.2-M78 and substitute new entry as follows: |

|     |                 |                            |                                                                                                                         |
|-----|-----------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------|
| CSA | CAN3-0437.0-M85 | Waferboard and Strandboard | 9.23.14.2.<br>9.23.14.6.<br>9.23.15.1.<br>9.23.15.3.<br>9.24.2.1.<br>9.24.2.2.<br>9.28.11.1.<br>9.30.12.1.<br>9.31.2.3. |
|-----|-----------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------|

| Page | Reference   | Revision                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 94   | 3.2.4.8.    | <p>Add new Sentences (3) and (4) and renumber existing Sentences (3) and (4) as (5) and (6).</p> <p>(3) The requirements in Sentence (1) are waived in a <i>building</i> that has an aggregate area for all <i>storeys</i> of not more than 2 000 m<sup>2</sup> and is not more than 3 <i>storeys</i> in <i>building height</i>.</p> <p>(4) When an annunciator is not installed as part of a required fire alarm system in conformance with Sentence (1), a visual and audible trouble signal device shall be provided inside the main entrance of the <i>building</i>.</p> |
| 126  | 3.4.2.1.(6) | <p>Add new Clause (b) and renumber existing Clauses (b) and (c) as (c) and (d).</p> <p>(b) they are not intended for an <i>occupant load</i> of more than 60,</p>                                                                                                                                                                                                                                                                                                                                                                                                            |
| 229  | 9.7.2.1.    | <p>Delete and substitute:</p> <p><b>9.7.2.1.</b> Windows shall conform at least to the requirements for window ratings A1, B1 and C1 in CAN3-A440, "Windows". (See Appendix A.)</p>                                                                                                                                                                                                                                                                                                                                                                                          |
| 305  | 9.23.14.2.  | <p>Delete and substitute:</p> <p><b>9.23.14.2.</b> Plywood for subfloors shall be exterior type conforming to CSA 0121, "Douglas Fir Plywood", CSA 0151, "Canadian Softwood Plywood" or CSA 0153, "Poplar Plywood". Waferboard and Strandboard shall conform to CAN3-0437.0, "Waferboard and Strandboard".</p>                                                                                                                                                                                                                                                               |

| Page | Reference  | Revision                                                                                                                                                                                                                                                                                                                                                                               |
|------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 305  | 9.23.14.   | <p>Add new Article 9.23.14.6. and renumber existing Articles 9.23.14.6. to 9.23.14.9. as 9.23.14.7. to 9.23.14.10.</p> <p><b>9.23.14.6.</b> Waferboard and strandboard subflooring conforming to 0-1 and 0-2 grades in CAN3-0437.0 shall be installed with the direction of face orientation at right angles to the joists and with joints parallel to floor joists staggered.</p>     |
| 306  | 9.23.15.1. | <p>Delete and substitute:</p> <p><b>9.23.15.1.</b> Plywood used for roof sheathing shall be exterior type plywood conforming to CSA 0121, "Douglas Fir Plywood", CSA 0151, "Canadian Softwood Plywood" or CSA 0153, "Poplar Plywood". Waferboard and strandboard for roof sheathing shall conform to CAN3-0437.0, "Waferboard and Strandboard".</p>                                    |
| 306  | 9.23.15.   | <p>Add new Article 9.23.15.3. and renumber existing Articles 9.23.15.3. to 9.23.15.7. as 9.23.15.4. to 9.23.15.8.</p> <p><b>9.23.15.3.</b> Waferboard and strandboard roof sheathing conforming to 0-1 and 0-2 grades in CAN3-0437.0 shall be installed with the direction of face orientation at right angles to the roof framing members.</p>                                        |
| 309  | 9.24.2.1.  | <p>Delete and substitute:</p> <p><b>9.24.2.1.</b> Floor and roof decking shall consist of not less than 38 mm lumber laid on the flat or on edge, or exterior type plywood conforming to CSA 0121, "Douglas Fir Plywood", CSA 0151, "Canadian Softwood Plywood", CSA 0153, "Poplar Plywood" or waferboard and strandboard conforming to CAN3-0437.0, "Waferboard and Strandboard".</p> |

| Page                  | Reference       | Revision                                                                                                                                                                                                                                                                                    |                       |         |         |         |          |
|-----------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------|---------|---------|----------|
| 309                   | 9.24.2.         | Add new Article 9.24.2.2. and renumber existing Article 9.24.2.2. as 9.24.2.3.<br><br><b>9.24.2.2.</b> Waferboard and strandboard decking conforming to 0-1 and 0-2 grades in CAN3-0437.0 shall be installed with the direction of face orientation at right angles to the framing members. |                       |         |         |         |          |
| 311                   | 9.25.1.3.       | Delete and substitute:<br><br><b>9.25.1.3.</b> Steel studs and runners shall conform to CAN/CGSB-7.1M, "Cold Formed Steel Framing Components".                                                                                                                                              |                       |         |         |         |          |
| 312                   | 9.25.1.         | Add new Article 9.25.1.4. and renumber existing Articles 9.25.1.4. and 9.25.1.5. as 9.25.1.5. and 9.25.1.6.<br><br><b>9.25.1.4.</b> Metal thickness specified in this Section shall be the minimum base steel thickness exclusive of coatings.                                              |                       |         |         |         |          |
| 312                   | Table 9.25.2.A. | Delete Column 1 and substitute:<br><table><tr><td>Minimum Stud Size, mm</td></tr><tr><td>30 x 40</td></tr><tr><td>30 x 63</td></tr><tr><td>30 x 91</td></tr><tr><td>Column 1</td></tr></table>                                                                                              | Minimum Stud Size, mm | 30 x 40 | 30 x 63 | 30 x 91 | Column 1 |
| Minimum Stud Size, mm |                 |                                                                                                                                                                                                                                                                                             |                       |         |         |         |          |
| 30 x 40               |                 |                                                                                                                                                                                                                                                                                             |                       |         |         |         |          |
| 30 x 63               |                 |                                                                                                                                                                                                                                                                                             |                       |         |         |         |          |
| 30 x 91               |                 |                                                                                                                                                                                                                                                                                             |                       |         |         |         |          |
| Column 1              |                 |                                                                                                                                                                                                                                                                                             |                       |         |         |         |          |
| 312                   | 9.25.2.2.       | Delete and substitute:<br><br><b>9.25.2.2.</b> Except as required in Article 9.25.2.4., steel studs in non-loadbearing interior walls shall have a metal thickness of not less than 0.46 mm.                                                                                                |                       |         |         |         |          |

|     |           |                                                                                                                                                                                                                              |
|-----|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 312 | 9.25.2.3. | Delete and substitute:<br><br>9.25.2.3. Runners for interior and exterior non-loadbearing walls shall have a thickness of not less than the thickness of the corresponding studs and shall have not less than 30 mm flanges. |
|-----|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|     |                 |                                        |
|-----|-----------------|----------------------------------------|
| 312 | Table 9.25.2.B. | Delete Columns 1 and 2 and substitute: |
|-----|-----------------|----------------------------------------|

| Minimum Stud Size, mm | Minimum Metal Thickness, mm |
|-----------------------|-----------------------------|
| 30 x 91               | 0.53                        |
| 30 x 91               | 0.69                        |
| 30 x 91               | 0.85                        |
| 30 x 91               | 1.0                         |
| Column 1              | 2                           |

|     |            |                                                                                                                                        |
|-----|------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 329 | 9.28.11.1. | Delete and substitute:<br><br>9.28.11.1. Waferboard and strandboard siding shall conform to CAN3-0437.0, "Waferboard and Strandboard". |
|-----|------------|----------------------------------------------------------------------------------------------------------------------------------------|

|     |            |                                                                                                                                                                                                                                     |
|-----|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 338 | 9.30.12.1. | Delete and substitute:<br><br>9.30.12.1. Particleboard finish shall conform to CAN3-0188.1, "Interior Mat-Formed Wood Particleboard". Waferboard and strandboard finish shall conform to CAN3-0437.0, "Waferboard and Strandboard". |
|-----|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| Page | Reference  | Revision                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 340  | 9.31.2.3.  | <p>Delete and substitute:</p> <p><b>9.31.2.3.</b> Panel-type underlay shall be not less than 6 mm thick and shall conform to one of the following:</p> <p>CSA 0115, "Hardwood and Decorative Plywood",</p> <p>CSA 0121, "Douglas Fir Plywood",</p> <p>CSA 0151, "Canadian Softwood Plywood",</p> <p>CSA 0153, "Poplar Plywood",</p> <p>CAN3-0188.1, "Interior Mat-Formed Wood Particleboard",</p> <p>CAN3-0437.0, "Waferboard and Strandboard", or</p> <p>CGSB 11-GP-3M, "Hardboard".</p> |
| 422  | Appendix A | <p>Add new Note A-9.7.2.1.:</p> <p><b>A-9.7.2.1. Windows.</b> The CSA Standard CAN3-A440, "Windows", includes a window classification system that rates the assembly according to air leakage, water leakage and wind load resistance. The ratings, shown below, are marked on the window and indicate the level of performance that can be expected. Units can then be selected which are most appropriate for design conditions.</p>                                                    |

Appendix A  
(Cont'd)

Air Leakage

- A1 - intended for use primarily in low-rise residential (i.e. buildings of 3 storeys or less and having an area not exceeding 600 m<sup>2</sup>), industrial, and light commercial use.
- A2 - intended for use primarily in medium- to high-rise residential, institutional, and commercial use.
- A3 - intended for use in high-performance institutional and commercial applications.

Water Leakage

- B1 - moderate climatic conditions
- B2 - severe climatic conditions
- B3 - extreme climatic conditions

Wind Resistance

- C1 - lowest wind load resistance
- C2 - medium wind load resistance
- C3 - highest wind load resistance

Article 9.7.2.1. has specified the lowest grades since the NBC is a collection of minimum requirements only. Designers or builders may wish to consider windows with higher ratings depending on the height of buildings, climatic conditions and occupancy classification.