

# INDEX

The Canada Plan Service is a co-operative provincial network of agricultural engineers, design draftspersons and livestock specialists. It is concerned with the planning, design and construction of modern farm buildings to serve the needs of Canadian agriculture. The Service gathers ideas from across the country and develops these as engineered construction and management recommendations. This makes the latest building technologies and farmstead management practices available to all Canadian farmers.

Each provincial department of agriculture has engineers and other extension specialists who work with farmers that request help in planning building renovations and new construction. Ten technical committees, composed of experts drawn from these specialists and the farm buildings industry, outline and develop the Canada Plan Service publications. These are numbered as series 1000 through 10000, corresponding to: beef; dairy; swine; sheep; poultry; fruits, vegetables and greenhouses; grain, forage and feeds; special structures; building engineering; and environment.

Canada Plan Service publications are prepared by each of the provinces and the Yukon and distributed by the CPS Co-ordination Unit. Some publications take the form of detailed construction plans on large drawing sheets; others are letter-sized management and construction leaflets. When released by the Co-ordination Unit, a copy is distributed to each province and the Yukon, who in turn reproduce and distribute them according to their needs.

A complete information package for a typical farm construction project might consist of two to seven large sheets of drawings plus one or two leaflets giving management and construction information.

This index lists the English-language plans and their corresponding leaflets available by number and title. A corresponding index lists those available in French. The letters MI in the 'Plan' column indicate that the plan is available in both 'metric' and 'imperial' dimensions - if you prefer the imperial version of plan 1114, for example, ask for plan 1114, not M-1114. Many newer leaflets listed as M(I) give both metric (and imperial) dimensions in the same leaflet.

In addition to plans and leaflets for specific buildings and farmstead equipment, this index lists some general-interest publications explaining construction, safety and planning principles. Examples are M-1800 Handling Facilities, M-3002 Site and Facilities Planning for Swine, M-7410 Silo Gas, M-10710 Manure Gas, and M-9401 Wood Preservatives.

---

| Plan | Leaflet | No. | Title | M = Metric units                     |
|------|---------|-----|-------|--------------------------------------|
|      |         |     |       | I = Imperial units                   |
|      |         |     |       | M(I) = Metric (imperial in brackets) |
|      |         |     |       | Q = Quick-release, provincial plan   |

---

**BEEF CATTLE**

|     |       |      |   |
|-----|-------|------|---|
|     | M I   | 1000 | Beef Cattle Housing and Equipment             |
| M I | M (I) | 1114 | Open-end Beef Barn, Drive-through Feeding     |
| M I | M (I) | 1303 | Calving Barn                                  |
|     | M I   | 1352 | Calf Range Shelter                            |
| M I | M     | 1611 | Portable Calf Creep Feeder <b>(Rev. 1998)</b> |
|     | M I   | 1623 | Expandable Feed Bunk                          |
|     | I     | 1633 | Fenceline Feeder (Pipe Frame)                 |
|     | M I   | 1642 | Giant Bale Feeders (Steel)                    |
|     | M I   | 1646 | Portable Hay Feeder                           |
|     | M I   | 1649 | Grain Self-feeder                             |
|     | M (I) | 1800 | Cattle Handling Facilities                    |
|     | M I   | 1811 | Corral and Feedlot Fencing                    |
|     | M I   | 1812 | Crowding Gate                                 |
|     | M I   | 1813 | Working Chute                                 |
|     | M I   | 1814 | Blocking Gates                                |
|     | M I   | 1816 | Stationary Adjustable Loading Chute           |
|     | M I   | 1817 | Adjustable Loading Chute                      |
|     | M I   | 1818 | Pregnancy Testing and A.I. Chute              |
|     | I     | 1820 | Loading System for Large Trucks               |
|     | M I   | 1831 | Minimum Working Corral                        |
|     | M I   | 1835 | Large Working Corral                          |

**DAIRY CATTLE**

|     |       |        |                                    |
|-----|-------|--------|------------------------------------|
|     | M (I) | 2000   | Dairy Cattle Housing and Equipment |
| M I | M I   | 2512   | Milkhouse, Outside Vestibule       |
| M I | M I   | 2513   | Milkhouse, Office and Washroom     |
| I   | I     | Q-2514 | Milkhouse with Equipment Room      |
|     | M I   | 2832   | Calf Hutch                         |
|     | M I   | 2834   | Individual Calf Pen                |

**SWINE**

|     |       |      |  |
|-----|-------|------|--|
|     | M (I) | 3000 | Swine Housing and Equipment                      |
|     | M     | 3002 | Site and Facilities Planning for Swine           |
|     | M (I) | 3003 | Swine Barn Construction and Services             |
| M I | M (I) | 3434 | Grower-finisher, Natural Ventilation, Truss Roof |
|     | M (I) | 3560 | Entrance, Office and Change Area                 |
|     | I     | 3561 | Large Swine Barn Office                          |
|     | I     | 3952 | Swine Barn Lighting Worksheet                    |

**SHEEP**

|   |       |      |  |
|---|-------|------|--|
| I | M I   | 4000 | Sheep Housing                                |
|   | I     | 4151 | Open-end Pole Sheep Barn, Drive-thru Feeding |
|   | M (I) | 4312 | Expandable Lambing Unit                      |
|   | M I   | 4611 | 6-sided Sheep Feeder                         |
|   | M I   | 4613 | Fixed Mineral Box                            |
|   | M I   | 4614 | Portable Mineral Box                         |
|   | M I   | 4621 | Hay and Grain Feeder for Sheep               |
|   | M I   | 4625 | Sheep Feed Rack                              |
|   | M I   | 4632 | Sheep Salt and Mineral Feeder                |
|   | M (I) | 4633 | Walk Through Hay and Grain Feeder            |
|   | M (I) | 4811 | Sheep Corral Unit                            |
|   | M (I) | 4812 | Working Chute                                |
|   | M I   | 4813 | Sheep Corral Fencing and Gates               |
|   | M (I) | 4831 | Portable Claiming Pen                        |

| Plan | Leaflet | No. | Title | M    | = | Metric units                   |
|------|---------|-----|-------|------|---|--------------------------------|
|      |         |     |       | I    | = | Imperial units                 |
|      |         |     |       | M(I) | = | Metric (imperial in brackets)  |
|      |         |     |       | Q    | = | Quick-release, provincial plan |

**POULTRY**

|   |       |        |   |
|---|-------|--------|---|
|   | I     | 5000   | Poultry Housing                           |
|   | M (I) | 5015   | Nests                                     |
|   | M (I) | 5210   | Layer Housing                             |
| I | M (I) | Q-5255 | 300 Hen Laying House (Minimum Facilities) |
|   | M (I) | 5310   | Broiler Housing                           |
|   | M (I) | 5320   | Pullet Housing                            |
|   | M (I) | 5602   | Lighting for Poultry Housing Leaflet      |
|   | M     | 5603   | Water Requirements for Poultry            |
|   | M     | 5702   | Proper Disposal of Dead Poultry           |

**FRUITS, VEGETABLES AND GREENHOUSES**

|      |       |        |  |
|------|-------|--------|--|
|      | M (I) | 6000   | Fruit and Vegetable Storage                          |
| M I  | M I   | 6111   | Refrigerated Bulk Vegetable Storage Wall             |
| M I  | M I   | 6112   | Refrigerated Pallet Fruit and Vegetable Storage Wall |
| M    | M     | Q-6116 | Controlled Atmosphere (CA) Storage                   |
|      | M (I) | 6122   | Potato Bin Bulkhead                                  |
| M I  | M (I) | 6312   | Bulk Potato Storage with Side Air Plenum             |
| I    | M (I) | Q-6313 | Bulk Potato Storage, 2500 tonnes, 2 Bins             |
| M(I) | M (I) | 6319   | Walk-In Cooler                                       |
|      | M (I) | 6330   | Fruit and Vegetable Storage Insulation               |
|      | M (I) | 6666   | Tunnel Forced-Air Coolers                            |
|      | M     | 6701   | Greenhouse Heating Requirements                      |
|      | M (I) | 6704   | Greenhouse Ventilation                               |
| M I  | M     | 6720   | Two Layer Polyethylene Greenhouse                    |

**GRAIN, FORAGE AND FEED**

|     |       |      |  |
|-----|-------|------|--|
|     | M (I) | 7000 | Grain, Forage and Feed Structures          |
|     | M (I) | 7129 | Short Portable Self-supporting Wall        |
|     | M (I) | 7410 | Silo Gas                                   |
| M I | M (I) | 7435 | Above-ground Horizontal Silo               |
| M I | M (I) | 7436 | Roofed Horizontal Silo                     |
| M I | M (I) | 7601 | Hay Storage for Round or Rectangular Bales |
|     | M (I) | 7651 | Heap Silos                                 |
| M I | M (I) | 7824 | Multiple Feed Bins                         |

**SPECIAL STRUCTURES**

|       |       |        |   |
|-------|-------|--------|---|
|       | I     | 8201   | Barn for Riding Horses                      |
|       | I     | 8202   | Barn for Riding Horses - 6 or 10 Box Stalls |
| M I   | M (I) | 8203   | Two-story Horse Barn                        |
|       | I     | Q-8211 | 100 Goat Milking Barn & Feed Area           |
| M     | M     | Q-8248 | 240 Doe Rabbitry                            |
|       | M (I) | 8311   | Machinery Storage (End Opening Doors)       |
| M (I) | M (I) | 8312   | Machinery Storage (Side Opening Doors)      |
| M I   | M (I) | 8313   | General Purpose Farm Storage, Stud Walls    |
| M (I) | M (I) | 8314   | Stud Wall Machinery Storage (Knee Braced)   |
| M (I) | M (I) | 8315   | Gambrel Roof Barn                           |
|       | M I   | 8362   | Texas Gate (Vehicle Pass)                   |
|       | M I   | 8364   | Farm Gate                                   |
|       | M (I) | 8365   | Page Wire Fencing                           |
|       | M (I) | 8366   | Barbed Wire Field Fencing                   |
|       | M (I) | 8367   | Barbed Wire Suspension Fencing              |
|       | M I   | 8368   | Windbreak Fences                            |

**M = Metric units**  
**I = Imperial units**  
**M(I) = Metric (imperial in brackets)**  
**Q = Quick-release, provincial plan**

**Plan Leaflet No. Title**

**BUILDING ENGINEERING**

|       |       |        |  |
|-------|-------|--------|--|
|       | M (I) | 9011   | Metric Fact Sheet  |
|       | M     | 9012   | Specifying Concrete for Agricultural Applications                          |
|       | M (I) | 9102   | Truss Erecting and Bracing   |
|       | M (I) | 9306   | Footing Systems For Agricultural Structures                                |
|       | M (I) | 9307   | Knee-brace Systems for Windbracing Farm Buildings                          |
|       | M (I) | 9308   | Buttresses for Windbracing Farm Buildings                                  |
|       | M (I) | 9309   | Concrete Retaining Walls   |
|       | M     | 9310   | Steel Roof Diaphragm Wind Bracing with Stud Walls                          |
|       | M (I) | 9312   | Plate Beams and Lintels  |
| M (I) | M (I) | 9313   | Steel Beams For Large Door Headers   |
|       | M (I) | 9341   | Sliding Doors  |
| M I   | M     | 9371   | Steel Ceiling Diaphragm  |
|       | M     | 9401   | Wood Preservatives   |
|       | M (I) | 9451   | Rodent and Bird Control in Farm Buildings                                  |
|       | M     | 9611   | Stray Voltage  |
|       | M (I) | 9700   | Fan Ventilation Principles and Rates                                       |
|       | M (I) | 9702   | Troubleshooting Livestock and Poultry Ventilation Problems                 |
|       | M (I) | 9705   | Selecting Fans for Livestock Buildings                                     |
|       | M (I) | 9707   | Protecting Workers in Livestock Barns From Dust and Gases                  |
|       | M (I) | 9708   | Farm Workers Health Problems Related to Air Quality Inside Livestock Barns |
|       | M (I) | 9710   | Fresh Air Inlets   |
|       | M I   | 9715   | Self-adjusting Slot Air Inlets   |
| M (I) | M     | Q-9731 | Passive Solar Shop Heating   |
|       | M I   | 9732   | Solar Ventilation Wall with Heat Storage                                   |
|       | M (I) | 9735   | Hot Water Floor and Space Heating  |
|       | M (I) | 9750   | Ventilating and Heating Small Livestock Rooms                              |
|       | M (I) | 9760   | Natural Ventilation  |
|       | M     | 9765   | Sizing Openings for Naturally Ventilated Barns                             |

**ENVIRONMENT**

|       |   |       |       |   |
|-------|---|-------|-------|---|
|       | I | I     | 10383 | Small Agricultural Waste Storage – Wood Walls – 24 Ft. Wide Maximum |
|       |   | M     | 10704 | Odour Control for Livestock Facilities                              |
| M I   |   | M I   | 10706 | Clay-Lined Manure Storage Pond with Pumping Dock                    |
| M I   |   | M I   | 10707 | Curbed Storage Slabs for Stacked Manure                             |
|       |   | M     | 10710 | Manure Gas  |
| M I   |   | M (I) | 10712 | Concrete Covered Rectangular Manure Tanks                           |
| M (I) |   |       | 10730 | Open Circular Manure Storage Tanks                                  |
| M     |   |       | 10731 | Open Rectangular Manure Storage Tanks with Cantilever Walls         |
| M     |   |       | 10732 | Open Rectangular Manure Storage Tanks with Buttressed Walls         |
| M     |   |       | 10733 | Covered Circular Manure Storage Tanks                               |
| M     |   |       | 10734 | Covered Rectangular Manure Storage Tanks                            |