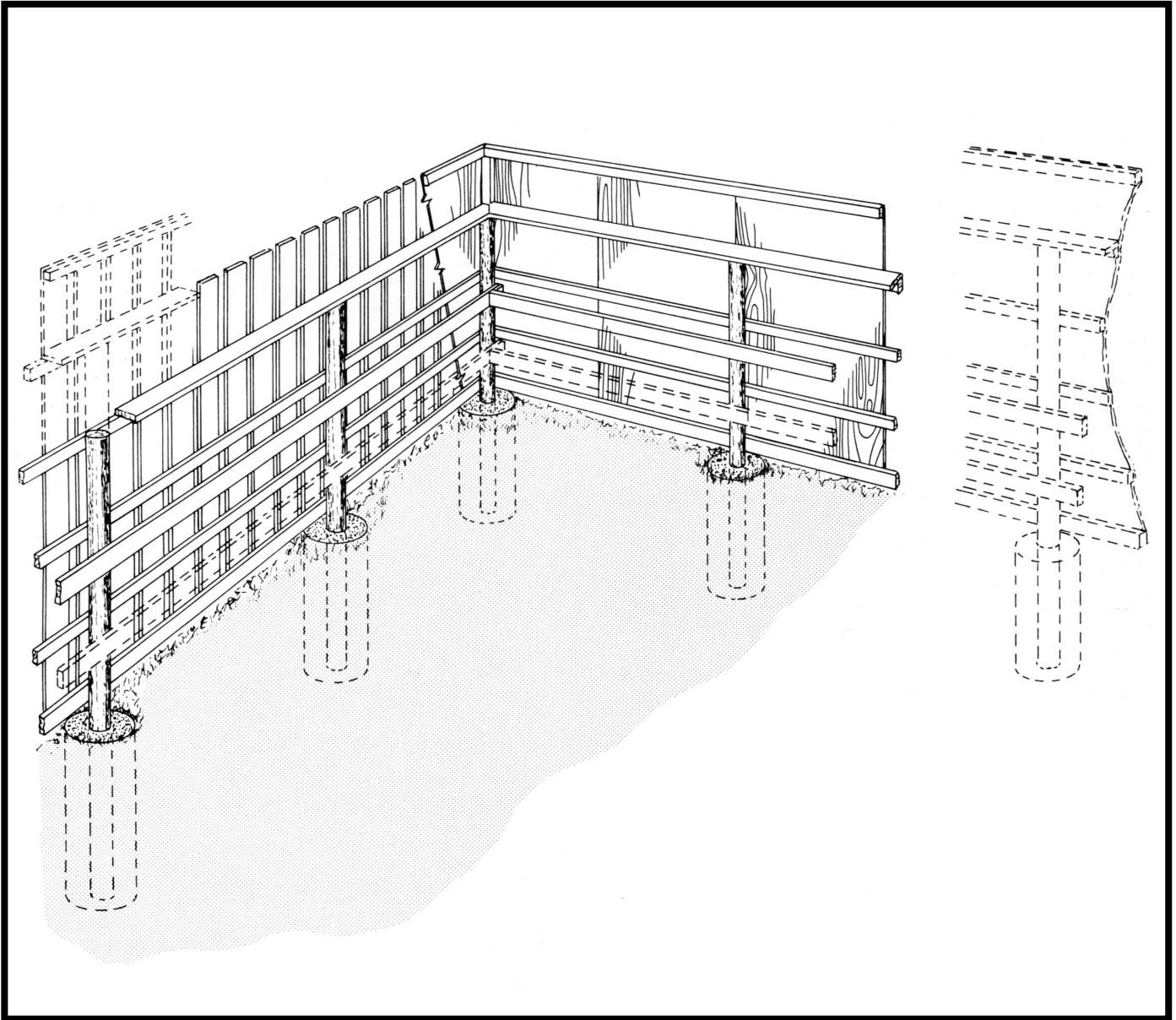


WINDBREAK FENCES



DEVELOPED BY CANADA PLAN SERVICE

316-14

WINDBREAK FENCES

CPS

PLAN 8368 NEW 83:04

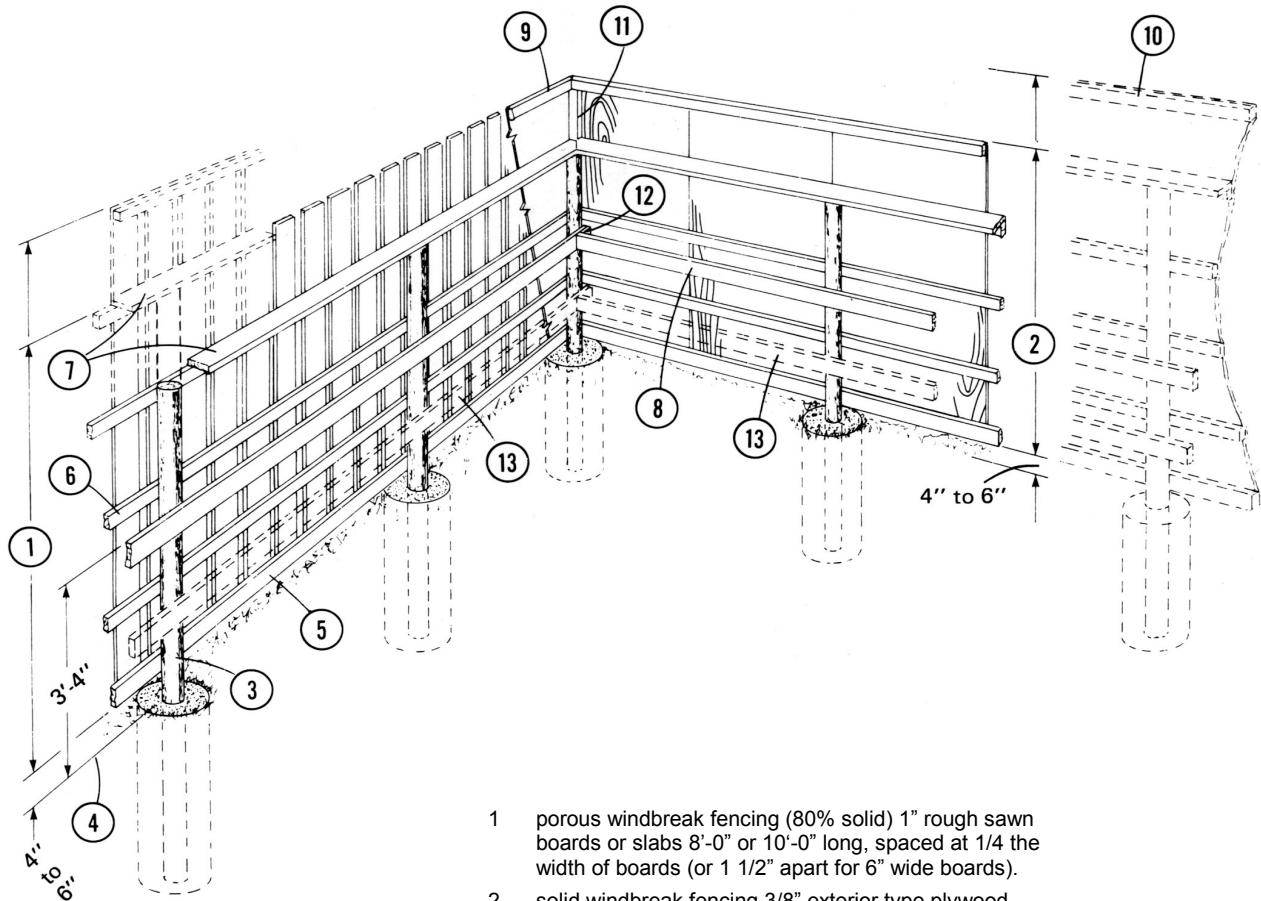
This style of windbreak works best for protection of feedlots where cold wind is the major weather problem and snow is relatively light. Research has shown that a porous windbreak allows some wind to filter through, providing better downwind protection than a solid windbreak of the same height. A windbreak with 20% porosity provides some wind protection as far as 12 times the fence height downwind, and very good shelter to about 6 fence-heights downwind.

Do not underestimate the force of wind on a board fence. Posts should be pressure treated with wood preservative to retain their strength for the lifetime of the fence. To help prevent overturning and frost heave, backfill the posts with concrete placed in smooth-walled posts-holes. If the posthole auger does not make smooth-walled holes (due to stony soil or cave-in) it is probably better to backfill with crushed stone or rubble, well compacted.

This fence is covered with 8 or 10 ft length vertical boards spaced to give about 20% opening and 80% solid area. Some feedlot operators reduce costs by using sawmill slabs where available, instead of the straight boards as shown. The bark is left exposed on the exterior side of the fence, and the slabs are spaced as required to give approximately 20% porosity.

The solid windbreak fence is used for feedlot protection in areas of heavy snow. Excellent wind protection extends 2 to 3 fence-heights downwind from the fence line.

The windbreak is framed with horizontal girts nailed to pressure-treated wood posts spaced at 8 ft centres. Plywood, aspen flakeboard, galvanized steel or vertical tight fitted boards are suitable cladding materials for the solid windbreak.



- 1 porous windbreak fencing (80% solid) 1" rough sawn boards or slabs 8'-0" or 10'-0" long, spaced at 1/4 the width of boards (or 1 1/2" apart for 6" wide boards).
- 2 solid windbreak fencing 3/8" exterior type plywood, aspen flakeboard or 26 ga. corrugated galv. steel, 8'-0" or 10'-0" long
- 3 6" top diam pressure treated posts @ 8'-0" o.c. (in soft soils, backfill posts with concrete)
8'-0" high fence use 10'-0" long posts, 3'-6" deep
10'-0" high fence use 12'-0" long posts, 4'-0" deep
- 4 grade line
- 5 2" x 6" pressure treated plank
- 6 2" x 4" nailing girts
- 7 2" x 8" fence cap
- 8 2" x 8" guard rail
- 9 2" x 4" stiffener
- 10 1" x 4" stiffener
- 11 2" x 4" corner brace
- 12 2" x 4" block
- 13 additional 2' x 8" guard rail if metal siding