WINDBREAK MATERIAL, SIZING, AND SPACING SELECTION CHARTS (125 PCF SOIL)

WYOMING NRCS ENG STD 561 - FABRICATED WINDBREAKS

NRCS Natural Resources Conservation Service

File Name: WY-561.Dwg

Drawing Number: **C-2**

SHEET 2 of 2

DESIGNED	DATE
DRAWN	DATE
CHECKED	DATE
APPROVED	DATE

MAX DESIGN WIND 65 MPH - MIN SOIL DENSITY 125 lb/ft³

ASTM A36 STRUCTURAL STEEL SHAPES	POST MATERIAL	BARRIER HEIGHT	WIND SPEEDS ARE NORMAL TO WALL: MAX POST SPACING	BURY DEPTH 4'	BURY DEPTH 5'	BURY DEPTH 6'	BURY DEPTH 7'
W5, W6 C6, C8	6" Ø ROUND	14'	X	7'-2"	6'-11"	6'-11"	6'-6"
		12'	X	9'-2"	12'-0"	10'-3"	7'-6"
		10'	6'-11"	12'-0"	12'-0"	12'-0"	10'-3"
		8'	9'-10"	12'-0"	12'-0"	12'-0"	12'-0"
		6'	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
	10"X10" SQUARE	14'	X	7'-2"	11'-6"	12'-0"	12'-0"
		12'	X	9'-2"	12'-0"	12'-0"	12'-0"
		10'	6'-11"	12'-0"	12'-0"	12'-0"	12'-0"
		8'	9'-10"	12'-0"	12'-0"	12'-0"	12'-0"
		6'	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
	2⅞" Ø SCH 40 ROUND	14'	X	X	X	X	X
		12'	X	X	X	X	X
		10'	X	X	X	X	X
		8'	X	X	6'-5"	6'-5"	6'-5"
		6'	11'-4"	11'-4"	11'-4"	11'-4"	11'-4"
	4" Ø SCH 40 ROUND	14'	X	X	X	X	X
		12'	X	X	6'-6"	6'-6"	6'-6"
		10'	X	9'-5"	9'-5"	9'-5"	9'-5"
		8'	9'-10"	12'-0"	12'-0"	12'-0"	12'-0"
		6'	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
	6" Ø SCH 40 ROUND	14'	X	7'-2"	11'-6"	12'-0"	12'-0"
		12'	X	9'-2"	12'-0"	12'-0"	12'-0"
		10'	6'-11"	12'-0"	12'-0"	12'-0"	12'-0"
		8'	9'-10"	12'-0"	12'-0"	12'-0"	12'-0"
		6'	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
DOUGLAS FIR - SELECT GRADE No 1 - Fb = 1200 lbs/in²	10"X10" SQUARE	14'	X	7'-2"	7'-6"	7'-6"	7'-6"
		12'	X	9'-2"	10'-3"	10'-3"	10'-3"
		10'	6'-11"	12'-0"	12'-0"	12'-0"	12'-0"
		8'	9'-10"	12'-0"	12'-0"	12'-0"	12'-0"
		6'	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
	8"X8" SQUARE	14'	X	X	X	X	X
		12'	X	X	X	X	X
		10'	X	X	X	X	X
		8'	X	9'-0"	12'-0"	12'-0"	12'-0"
		6'	8'-0"	12'-0"	12'-0"	12'-0"	12'-0"
	6"X6" SQUARE	14'	X	X	X	X	X
		12'	X	X	X	X	X
		10'	X	X	X	X	X
		8'	X	X	X	X	X
		6'	8'-0"	8'-6"	8'-6"	8'-6"	8'-6"
	10" Ø ROUND	14'	X	X	X	7'-5"	7'-5"
		12'	X	X	6'-4"	10'-1"	10'-9"
		10'	X	6'-4"	9'-0"	12'-0"	15'-4"
		8'	X	9'-0"	12'-0"	12'-0"	12'-0"
		6'	8'-0"	12'-0"	12'-0"	12'-0"	12'-0"
	8" Ø ROUND	14'	X	X	X	X	X
		12'	X	X	X	X	X
		10'	X	X	X	X	X
		8'	X	8'-7"	8'-7"	8'-7"	8'-7"
		6'	8'-0"	12'-0"	12'-0"	12'-0"	12'-0"
	6" Ø ROUND	14'	X	X	X	X	X
		12'	X	X	X	X	X
		10'	X	X	X	X	X
		8'	X	X	7'-7"	11'-2"	12'-0"
		6'	8'-0"	12'-0"	12'-0"	12'-0"	12'-0"
ASTM A36 STRUCTURAL STEEL SHAPES	POST MATERIAL	BARRIER HEIGHT	WIND SPEEDS ARE NORMAL TO WALL: MAX POST SPACING	BURY DEPTH 4'	BURY DEPTH 5'	BURY DEPTH 6'	BURY DEPTH 7'
W5, W6 C6, C8	6" Ø SCH 40 ROUND	14'	X	7'-2"	6'-11"	6'-11"	6'-6"
		12'	X	9'-2"	12'-0"	10'-3"	7'-6"
		10'	6'-11"	12'-0"	12'-0"	12'-0"	10'-3"
		8'	9'-10"	12'-0"	12'-0"	12'-0"	12'-0"
		6'	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
	10"X10" SQUARE	14'	X	7'-2"	11'-6"	12'-0"	12'-0"
		12'	X	9'-2"	12'-0"	12'-0"	12'-0"
		10'	6'-11"	12'-0"	12'-0"	12'-0"	12'-0"
		8'	9'-10"	12'-0"	12'-0"	12'-0"	12'-0"
		6'	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
	2⅞" Ø SCH 40 ROUND	14'	X	X	X	X	X
		12'	X	X	X	X	X
		10'	X	X	X	X	X
		8'	X	X	6'-5"	6'-5"	6'-5"
		6'	11'-4"	11'-4"	11'-4"	11'-4"	11'-4"
	4" Ø SCH 40 ROUND	14'	X	X	X	X	X
		12'	X	X	6'-6"	6'-6"	6'-6"
		10'	X	9'-5"	9'-5"	9'-5"	9'-5"
		8'	9'-10"	12'-0"	12'-0"	12'-0"	12'-0"
		6'	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
	6" Ø SCH 40 ROUND	14'	X	7'-2"	11'-6"	12'-0"	12'-0"
		12'	X	9'-2"	12'-0"	12'-0"	12'-0"
		10'	6'-11"	12'-0"	12'-0"	12'-0"	12'-0"
		8'	9'-10"	12'-0"	12'-0"	12'-0"	12'-0"
		6'	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
DOUGLAS FIR - SELECT GRADE No 1 - Fb = 1200 lbs/in²	8"X8" SQUARE	14'	X	7'-2"	7'-6"	7'-6"	7'-6"
		12'	X	9'-2"	10'-3"	10'-3"	10'-3"
		10'	6'-11"	12'-0"	12'-0"	12'-0"	12'-0"
		8'	9'-10"	12'-0"	12'-0"	12'-0"	12'-0"
		6'	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
	6"X6" SQUARE	14'	X	X	X	X	X
		12'	X	X	X	X	X
		10'	X	X	X	X	X
		8'	X	X	9'-1"	9'-1"	9'-1"
		6'	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
	10" Ø ROUND	14'	X	7'-2"	10'-6"	10'-6"	10'-6"
		12'	X	9'-2"	12'-0"	12'-0"	12'-0"
		10'	6'-11"	12'-0"	12'-0"	12'-0"	12'-0"
		8'	9'-10"	12'-0"	12'-0"	12'-0"	12'-0"
		6'	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
	8" Ø ROUND	14'	X	X	X	X	X
		12'	X	X	X	X	7'-4"
		10'	6'-11"	10'-7"	10'-7"	10'-7"	10'-7"
		8'	9'-10"	12'-0"	12'-0"	12'-0"	12'-0"
		6'	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
	6" Ø ROUND	14'	X	X	X	X	X
		12'	X	X	X	X	X
		10'	X	X	X	X	X
		8'	X	X	6'-6"	6'-6"	6'-6"
		6'	6'-6"	6'-6"	6'-6"	6'-6"	6'-6"

GIRT SIZE AND SPACING SELECTION CHART - MAX 65 MPH WIND

	POST SPACING			
BARRIER HEIGHT	6'	8'	10'	12'
6'	(3)-2X4 @ 30" (3)-3"Ø Wood @ 30" (3)-2"Ø Steel @ 30"	(3)-2X4 @ 30" (3)-3"Ø Wood @ 30" (3)-2"Ø Steel @ 30"	(4)-2X4 @ 20" (3)-3"Ø Wood @ 30" (3)-2"Ø Steel @ 30"	(4)-2X6 @ 20" (3)-3"Ø Steel @ 30" (4)-3"Ø Wood @ 30"
8'	(3)-2X4 @ 42" (3)-3"Ø Wood @ 42" (3)-2"Ø Steel @ 42"	(4)-2X4 @ 28" (3)-3"Ø Wood @ 42" (3)-2"Ø Steel @ 42"	(4)-2X6 @ 28" (3)-3"Ø Wood @ 42" (3)-2"Ø Steel @ 42"	(5)-2X6 @ 22" (4)-2X8 @ 28" (3)-3"Ø Steel @42"
10'	(3)-2X4 @ 54" (3)-3"Ø Wood @ 54" (3)-2"Ø Steel @ 54"	(5)-2X4 @ 27" (4)-2X6 @ 36" (3)-2X8 @ 54" (4)-3"Ø Wood @ 54" (3)-2"Ø Steel @ 54"	(7)-2X4 @ 18" (5)-2X6 @ 27" (4)-2X8 @ 36" (3)-3"Ø Wood @ 21" (3)-2"Ø Steel @ 54"	(7)-2X6 @ 18" (5)-2X8 @ 27" (4)-2X10 @ 36" (4)-3"Ø Wood @ 36" (3)-3"Ø Steel @ 54"
12'	(4)-2X4 @ 44" (3)-3"Ø Wood @ 44" (4)-2"Ø Steel @ 44"	(6)-2X4 @ 26" (4)-2X6 @ 44" (4)-3"Ø Wood @ 33" (3)-2"Ø Steel @ 44"	(8)-2X6 @ 19" (6)-2X8 @ 26" (6)-2X10 @ 26" (4)-3"Ø Wood @ 44" (3)-3"Ø Steel @ 44"	(7)-2X8 @ 26" (6)-2X10 @ 33" (5)-2X12 @ 33" (4)-3"Ø Wood @ 44" (4)-4"Ø Wood @ 33" (3)-3"Ø Steel @ 44"
14'	(7)-2X4 @ 26" (5)-2X6 @ 39" (4)-2X8 @ 52" (4)-3"Ø Wood @ 52" (4)-4"Ø Wood @ 26" (4)-2"Ø Steel @ 52"	(8)-2X6 @ 22" (6)-2X8 @ 31" (8)-3"Ø Wood @ 22" (5)-2"Ø Steel @ 52" (5)-4"Ø Wood @ 39" (4)-3"Ø Steel @ 52"	(9)-2X8 @ 19" (7)-2X10 @ 26" (6)-2X12 @ 31" (4)-3"Ø Steel @ 52" (7)-2"Ø Wood @ 26" (4)-3"Ø Wood @ 52"	(9)-2X12 @ 19" (6)-5"Ø Wood @ 31" (5)-3"Ø Steel @ 39"

GIRT SIZE AND SPACING SELECTION CHART - MAX 90 MPH WIND

	POST SPACING			
BARRIER HEIGHT	6'	8'	10'	12'
6'	(3)-2X4 @ 30" (3)-3"Ø Wood @ 30" (3)-2"Ø Steel @ 30"	(5)-2X4 @ 15" (4)-2X6 @ 20" (3)-3"Ø Wood @ 30" (3)-2"Ø Steel @ 30"	(5)-2X6 @ 15" (4)-2X8 @ 20" (3)-4"Ø Wood @ 30" (3)-2"Ø Steel @ 30"	(5)-2X8 @ 15" (4)-4"Ø Wood @ 20" (4)-2"Ø Steel @ 20" (3)-3"Ø Steel @ 30"
8'	(3)-2X4 @ 42" (3)-3"Ø Wood @ 42" (3)-2"Ø Steel @ 42"	(4)-2X6 @ 28" (3)-3"Ø Wood @ 42" (3)-2"Ø Steel @ 42"	(4)-2X8 @ 28" (3)-4"Ø Wood @ 28" (3)-2"Ø Steel @ 42"	(6)-2X10 @ 17" (5)-2X12 @ 22" (6)-4"Ø Wood @ 17" (4)-3"Ø Steel @ 28"
10'	(5)-2X4 @ 27" (4)-2X6 @ 36" (3)-2X8 @ 54" (3)-3"Ø Wood @ 27" (3)-2"Ø Steel @ 54"	(6)-2X6 @ 21" (5)-2X8 @ 27" (4)-2X10 @ 36" (3)-3"Ø Wood @ 54" (3)-2"Ø Steel @ 54"	(6)-2X8 @ 21" (5)-2X10 @ 27" (4)-2X12 @ 36" (4)-3"Ø Wood @ 54" (3)-2"Ø Steel @ 54"	(7)-2X10 @ 18" (6)-2X12 @ 21" (7)-4"Ø Wood @ 18" (4)-3"Ø Steel @ 36" (3)-3"Ø Steel @ 54"
12'	(6)-2X4 @ 26" (4)-2X6 @ 44" (4)-3"Ø Wood @ 26" (4)-2"Ø Steel @ 44"	(6)-2X6 @ 26" (5)-2X8 @ 33" (5)-4"Ø Wood @ 33" (4)-3"Ø Steel @ 44"	(8)-2X8 @ 19" (6)-2X10 @ 26" (6)-4"Ø Wood @ 26" (6)-2"Ø Steel @ 26" (4)-3"Ø Steel @ 44"	(7)-2X12 @ 22" (8)-4"Ø Wood @ 19" (4)-3"Ø Steel @ 44"
14'	(7)-2X4 @ 26" (5)-2X6 @ 39" (4)-2X8 @ 52" (4)-3"Ø Wood @ 26" (4)-4"Ø Wood @ 52" (4)-2"Ø Steel @ 52"	(8)-2X6 @ 22" (6)-2X8 @ 31" (8)-3"Ø Wood @ 22" (5)-2"Ø Steel @ 52" (5)-4"Ø Wood @ 39" (4)-3"Ø Steel @ 52"	(9)-2X8 @ 19" (7)-2X10 @ 26" (6)-2X12 @ 31" (4)-3"Ø Steel @ 52" (7)-2"Ø Wood @ 26" (4)-3"Ø Wood @ 52"	(9)-2X12 @ 19" (6)-5"Ø Wood @ 31" (5)-3"Ø Steel @ 39" (6)-2"Ø Steel @ 31" (4)-3"Ø Wood @ 39"