

GUIDE TO CSSB-97 GRADING RULES

CONFORMS WITH UBC 15-4, CSA 0118.1-97, CSSB-97

Thickness:

- The thickness of 5 butts must be 2 inches or greater.
- Butt thickness must be uniform - not thick and thin.

Part Five - 16 Inch 5X Shingle Packing

- Total inches of “on grade” shingles per bundle must be greater than 695 inches if packing 4 bundles per square.
- Normal pack for 16 inch 5X shingles is either a) 22/22 pack in an 18 inch frame or 20/20 pack in a 20 inch frame.
- No excessively wide openings in any packed course or row.
- Joints or spaces between shingles in adjoining rows should be broken by placing a shingle completely over the space.
- No overlapping shingles in the same course or row, all shingles must lie flat.
- Shingles are to be packed to the outside edges of the packing frame.
- Each bundle must be identified with a Certigrade or mill grade label according to the proper grade of the shingles
- The label must be placed under the bandstick or band on the width of each bundle.
- Each pallet must have a packer identification mark. (Pallet Tag)

The CSSB-97 Grading Rules are the grading rules accepted by the International Code Council (“ICC”) which publishes the IBC and IRC building codes. These codes are applicable to all cedar shake and shingle products sold in the United States.

Cedar shake and shingle products sold in Canada must meet the CSA 0118.1 Standard.

The Cedar Shake & Shingle Bureau requires that its members’ products meet the applicable standards. Do yours?

CERTIGRADE® - 16 Inch FiveX Shingles

16 INCH 5X SHINGLE CHART		No. 1-Blue	No. 2-Red	No. 3-Black
WOOD:	Clear area	All	10"	6"
	Sapwood	None	1"	Yes
	Flat Grain	None	Yes	Yes
	Checks	None	1" (to 15")	2" (to 14")
	Defects Size	None	3"	3"
	Total	No	1/2" width	2/3" width
LENGTH	Maximum	None	None	None
	Minimum	15"	15"	14"
	Exposure Line	5"	4"	3-1/2"
WIDTH	Maximum	None	None	None
	Minimum	4"	4"	4"
	Under Size %	10%	20%	30%
	Minimum	3"	3"	2-1/2"
	Off Parallel	1/4"	1/4"	3/8"
Thickness Minimum		5 butts equal 2 inches		
Coverage (@ 4 bundles/sq.)		695 inches “on grade” per bundle		
Pack 18 inch Frame		22/22 pack		
20 inch Frame		20/20 pack		

Contact the Cedar Shake & Shingle Bureau for application instructions

Cedar Shake & Shingle Bureau

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Part One - Shingle Description

Shingles have smooth sawn backs and fronts. Shingles are produced by sawing blocks on a shingle machine, tilting the block each cut to produce tapered pieces and then trimming the edges.

Part Two - Shingle Definition.

- Butt - the thick end of the shingle.
- Check - any split or separation of the wood. Sun/Butt checks are permitted, in from the butt, up to 3/8 inch.
- Course - a layer or row of shingles in a bundle.
- Crimps - the collapse of the wood cells giving the shingle a caved - in appearance.
- Decay - rot, decomposing wood.
- Exposure - the portion of the shingle that when on the roof is exposed to the weather.
- Exposure line - the line created by the next row of shingles when properly laid on a roof. For no. 1 shingles the exposure line is at 5 inches, for no. 2 shingles the exposure line is at 4 inches and for No. 3 shingles the exposure line is at 3-1/2 inches up from the butt.
- Feather Tips - a rough tip caused when the saw comes out the side forming a flimsy, feather like tip.
- Grain - is the directions of the fibers in wood.
 - Cross Grain - the grain runs from the front of the shingle to the back within 3 inches of the length of the shingle in the area 6 inches up from the butt.
 - Diagonal Grain - the grain does not run parallel to the edge of the shingles. It is a defect if it slants off more than 2 inches side ways in 12 inches of length.
 - Edge Grain - the wood is split or sawn at right angles to the annual rings or growth rings.
 - Flat Grain - the wood is cut with the growth rings
 - Torn Grain - the fuzzy or whiskered appearance in the face of the shingle usually caused by a dull saw.
- Knot - a piece of a branch or limb embedded in the shingle. Knots are not allowed in No. 1 shingles
- Pack - refers to the number of courses of shingles at each end of a bundle. Normally 20/20 pack for 4 bundles per square in a 20 inch wide packing frame or 22/22 pack in an 18 inch packing frame.
- Tip - the thin end of a shingle.
- Worm/Toredo hole - a hole or passage burrowed in the shingle by a worm or insect.

Part Three - Shingle Quality Standards

No. 1 Grade 16 inch 5X Shingles

- 100% Clearwood - No knots, worm holes, decay or crimp permitted.
- Tip checks are permitted up to 1 inch long down to 15 inches.
- All 100% Edge Grain - No Flat grain, no Cross grain and no Diagonal grain.
- Graded from the best face.

No. 2 Grade 16 inch 5X Shingles

- 10 Inches clear up from the butt.
- Flat grain and Diagonal grain is permitted.

- Tip checks are permitted up to 1 inch long, down to 15 inches.
- 1 inch of sapwood is allowed on one edge of the shingle in the first 10 inches up from the butt.
- Defects may be up to 3 inches in diameter.
- Total defects must not exceed 1/2 the width of the shingle.

No. 3 Grade

- 6 inches clear up from the butt.
- Grain deviations are not defects.
- Tip checks are permitted up to 2 inches long, down to 14 inches.
- Sapwood is permitted.
- Defects may be up to 3 inches in diameter.
- Total defects must not exceed 2/3 the width of the shingle.

Part Four - 5X Shingle Size

Lengths:

No. 1 Grade 16 inch 5X shingles

- 16 inch shingles can be down to 15 inches in length.

No. 2 Grade 16 inch 5X shingles

- 16 inch shingles can be down to 15 inches in length.

No. 3 Grade 16 inch 5X shingles

- 16 inch shingles can be down to 14 inches in length.

Widths:

No. 1 Grade 16 inch 5X shingles

- The minimum width shall be 4 inches with a minus tolerance down to 3 inches in up to 10% of the bundle.
- Edges must be parallel - the width measured at the tip and butt must be the same with no more than a 1/4 inch difference.

No. 2 Grade 16 inch 5X shingles

- The minimum width shall be 4 inches with a minus tolerance down to 3 inches allowed in up to 20% of the bundle.
- Edges must be parallel to 3/8 of an inch.

No. 3 Grade 16 inch 5X shingles

- The minimum width shall be 4 inches with a minus tolerance down to 2 1/2 inches allowed in up to 30% of the bundle.
- Edges must be parallel to 3/8 of an inch.