

Part One - Shingle Description

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

Part Two - Shingle Definitions

- 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 5-1/2 inches, for No. 2 shingles the exposure line is at 4-1/2 inches and for No. 3 shingles the exposure line is at 4 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 18 inch wide 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 18 inch Perfection Shingles

- 100% Clearwood - No knots, worm holes, decay or crimp permitted.
- All 100% Edge Grain - No Flat grain, no Cross grain and no Diagonal grain.
- Tip checks are permitted up to 1 inch long, down to 17 inches.
- Graded from the best face.
- Waves and torn fibers are permitted on the back face.

No. 2 Grade 18 inch Perfection Shingles

- 11 inches clear up from the butt.
- Flat grain and Diagonal grain is permitted.
- Tip checks are permitted up to 2 inches long, down to 16 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 18 inch Perfection Shingles

- 6 inches clear up from the butt.
- Grain deviations are not defects.
- Tip checks are permitted up to 2 inches long, down to 16 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 - Perfection Shingle Size

Lengths:

No. 1 Grade 18 inch Perfection shingles.

- 18 inch shingles can be a minimum of 17 inches.

No. 2 Grade 18 inch Perfection shingles

- 18 inch shingles can be a minimum of 16 inches.

No. 3 Grade 18 inch Perfection shingles

- 18 inch shingles can be a minimum of 16 inches.

Widths:

No. 1 Grade 18 inch Perfection 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 up to 1/4 of an inch.

No. 2 Grade 18 inch Perfection shingles

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

No. 3 Grade 18 inch Perfection shingles

CERTIGRADE 18 INCH PERFECTIONS

- The minimum width shall be 4 inches with a minus tolerance down to 3 ½ inches in up to 30% of the bundle.
- Edges must be parallel up to 3/8 of an inch.

Thickness:

- The thickness of 5 butts must be 2-1/4 inches or greater.
- Butt thickness must be uniform - not thick and thin.

Part Five - 18 Inch Perfection Shingle Packing

- Total inches of “on grade” shingles per bundle must be greater than 635 inches if packing 4 bundles per square.
- Normal pack for 18 inch Perfection shingles is either a) 20/20 pack in an 18 inch frame or 18/18 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)

CEDAR SHAKE & SHINGLE BUREAU

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Contact the Cedar Shake and Shingle Bureau for application instructions.

GUIDE TO CSSB-97 GRADING RULES

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

CERTIGRADE® - 18 Inch Perfection Shingles

18" PERFECTION SHINGLE CHART		No. 1-Blue	No. 2-Red	No. 3-Black
WOOD:	Clear area	All	11"	6"
	Sapwood	None	1"	Yes
	Flat Grain	None	Yes	Yes
	Checks	None	2" (to 16")	2" (to 16")
	Defects Size Total	None	3" 1/2" width	3" 2/3" width
LENGTH	Maximum	None	None	None
	Minimum	17"	16"	16"
	Exposure Line	5-1/2"	4-1/2"	4"
WIDTH	Maximum	None	None	None
	Minimum	4"	4"	4"
	Under Size %	10%	20%	30%
	Minimum	3"	3"	3"
	Off Parallel	1/4"	3/8"	3/8"
Thickness Minimum		5 butts equal 2-1/4 inches		
Coverage (@ 4 bundles/sq.)		635 inches “on grade” per bundle		
Pack 18 inch Frame		20/20 pack		
Pack 20 inch Frame		18/18 pack		

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 & Shingle products sold in the United States. Cedar Shake & 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?