



How To Safely Make Bevel Cuts (Introduction)

Don't Hesitate To Ask For Help!



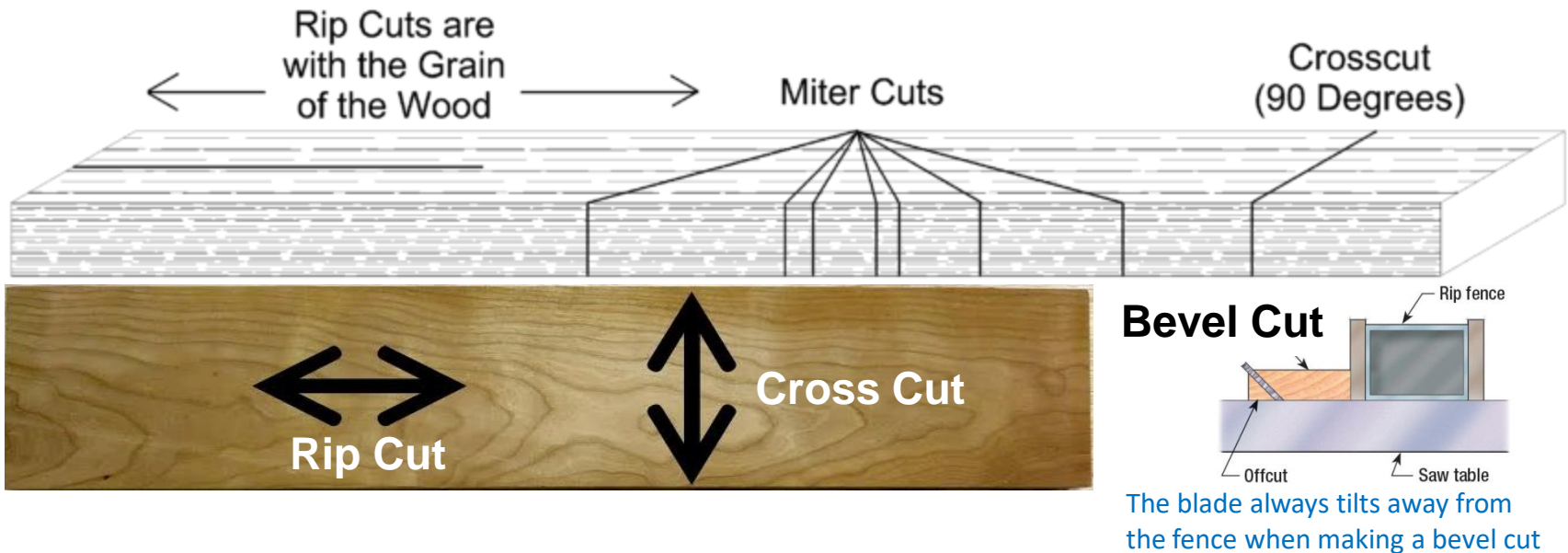
Overview

- Types of Cuts – The Basics
- Useful Accessories
- Applicable Tools
 - Table Saw
 - Band Saw
 - Sliding Compound Miter Saw
 - Jointer
 - Router
 - CNC

The Size And Complexity Of Your Project Has A Significant Impact On The Tool(s) You Use

Types of Cuts – The Basics

- Rip cuts – with the grain to a specific width
- Cross Cuts – across the grain to a specific length
- Miter Cuts – across the grain to a specific angle along the face
- Bevel Cuts – with the grain or across the grain to a specific angle along an edge



Type Of Cut Drives How To Set Up and Operate The Tool

Useful Accessories

- Digital Angle Gauge



- Digital Angle Finder



- Six Inch Steel Ruler





Work Piece Size Affects Which Tool To Use

Tool	Maximum Thickness (45 and 90 degrees)	Minimum Length	Notes
Bandsaw – use the ½” blade	8-1/4” at 45° 13” at 90°	Minimum length: None Specified	<ol style="list-style-type: none"> 1. Smaller pieces up to larger pieces 2. Risk of pinching and kick down 3. Adjust table to required angle
Table Saw	1-7/8” at 45° 2-3/4” at 90°	Minimum length 12”	<ol style="list-style-type: none"> 1. Larger pieces 2. Risk of pinching and kickback 3. Adjust blade to required angle 4. May require removal of blade guard assembly (safety devices) – proceed with caution 5. Sleds may be available to simplify the cuts
Sliding Compound Miter Saw (Horizontal Work Piece)	2” at 45° 7” at 90°	Minimum length 12”	<ol style="list-style-type: none"> 1. Larger pieces 2. Risk of pinching and kickback 3. Can make compound cuts (e.g. crown molding)
Sliding Compound Miter Saw (Vertical Work Piece)	7” at 45° 7” at 90°	Minimum length 12”	<ol style="list-style-type: none"> 1. Larger pieces 2. Risk of pinching and kickback 3. Can make compound cuts (e.g. crown molding)
8” Jointer	7” at 45° 8” at 90°	Minimum length 12”	<ol style="list-style-type: none"> 1. Larger pieces 2. Adjust fence to required angle 3. Not normally used for bevel cuts but is a documented capability of the tool.
Router	Bit Dependent	Minimum length: None Specified	<ol style="list-style-type: none"> 1. Smaller pieces up to larger pieces 2. Router bit defines the angle 3. Not normally used for bevel cuts but can be used.
CNC	None Specified	Minimum length: None Specified	<ol style="list-style-type: none"> 1. Smaller pieces up to larger pieces 2. CNC bit defines the angle 3. Must complete training and be certified

Plan Your Work. How Much Material Will You Have For The First And **Last** Cut

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Next Steps

- Plan or review your project and cuts
 - Pay attention to the thickness, length, and width of your work pieces
 - Include additional length or width to work pieces if required in order to safely make cuts
- Based on the matrix,
 - Review the detailed guides for making bevel cuts for appropriate tool(s)
 - Determine which tool is the safest to use for your project
 - Assess the benefits and risks based on your experience and the safeguards available with each tool
 - **If you're not sure, ask for help**
- Make your cuts

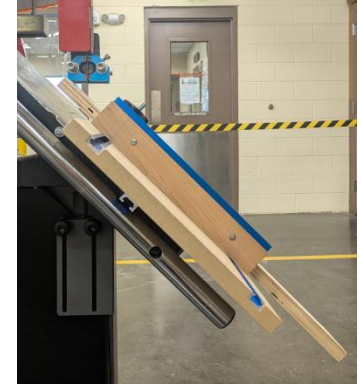


Appendix A

Quick Overview

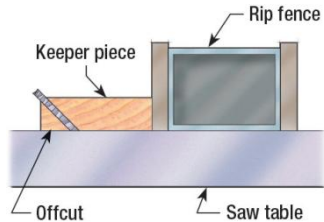
Positioning The Work Piece

Bandsaw

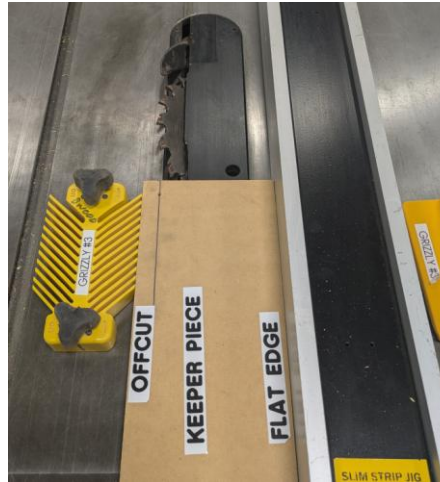


Maximum Thickness 8-1/4" At 45°

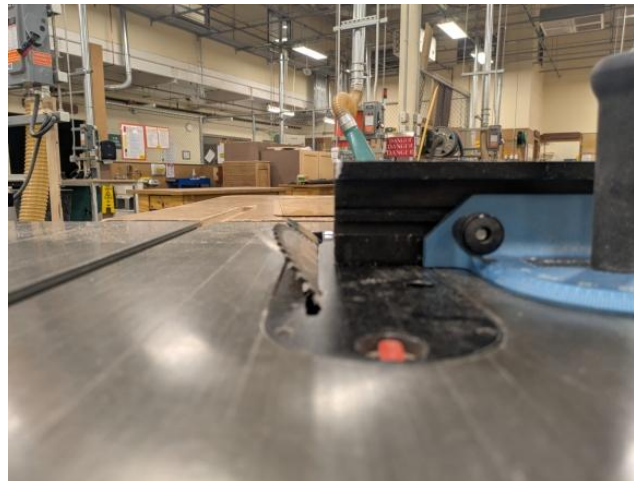
Table Saw



The blade always tilts away from the fence when making a bevel cut



Work Piece Secured Against The Fence For Rip Cut



Work Piece Secured Against The Miter Gauge For Cross Cut

Sliding Compound Miter Saw



Work Piece Secured Vertically Against The Fence (7" Max Height, 7-1/2" Max Depth At 45°)



Work Piece Secured Horizontally Against The Table (2" Max Height At 45°, 10" Max Depth)

Jointer



Work Piece Secured Vertically Against The Fence (7" Max Thickness At 45°)