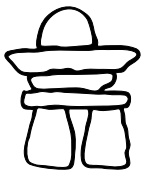


WOODWORKING MASTERCLASS

Sharpening Plane & Chisel Blades

A guide to achieving a razor-sharp, mirror-polished edge by flattening, honing, and stropping your tools.



FUNDAMENTALS

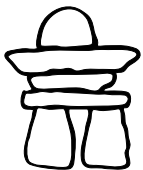
Why Sharpness Matters

Performance & Quality

- Achieve cleaner cuts with less physical effort.
- Significantly reduces tear-out, leaving a glass-smooth wood surface.
- Ensures better control and precision in your work.

Safety & Longevity

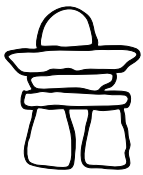
- A sharp tool is a safe tool; it cuts predictably and requires less force, reducing the risk of slips.
- Proper maintenance extends the life of your tools.
- Test sharpness safely on paper—a sharp blade slices cleanly with no tearing.



TOOL REQUIREMENTS

Tool Kit

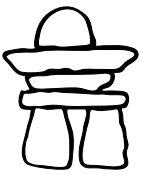
1. **Sharpening Stones:** Diamond Plates, Oil Stones, or Water Stones.
2. **Stones of Several Different Grits:** Coarse, Medium, Fine, Super Fine.
3. **Optional Items:**
 - Sharpening Jig
 - Granite Slab
 - 3/8" thick piece of glass
 - 100 grit sand paper
 - Leather Strop
 - Lubricant: Water or Oil
 - Jewelers Polishing Compound
 - Rags



SHARPENING MEDIUMS

Comparison of Sharpening Stones

Stone Type	Strengths	Limitations	Best For
Diamond Plates	Stay perfectly flat, cut very fast, low maintenance.	Can feel aggressive; high initial cost.	Flattening stones, repairing damaged edges, rapid material removal.
Water Stones	Fast cutting, provide excellent feedback, available in a wide range of grits.	Require frequent flattening as they dish with use.	General sharpening and fine honing for a keen edge.
Japanese Water Stones	Extremely fast cutting, ideal for hard laminated steels.	Wear down quickly and require careful maintenance.	Achieving a highly polished, refined edge on high-quality tools.
Oil Stones	Durable, wear slowly, predictable results.	Slower cutting speed compared to water stones; can be messy.	General-purpose shop use where durability is key.
Ceramic Stones	Very hard and wear-resistant, great for maintaining an edge.	May cut slower than softer water stones.	Fine sharpening and quick touch-up work.

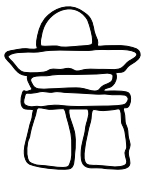


GRIT & ANGLES

Practical Grit Progression & Bevel Angles

Typical Grit Progression

- **Coarse (300-600 Grit):** For repairing chips, establishing a new bevel, or initial flattening of the back.
- **Medium (1000-1200 Grit):** The workhorse for routine sharpening and establishing the micro-bevel.
- **Fine (4000-8000+ Grit):** For polishing the micro-bevel to a mirror finish and removing the fine burr.



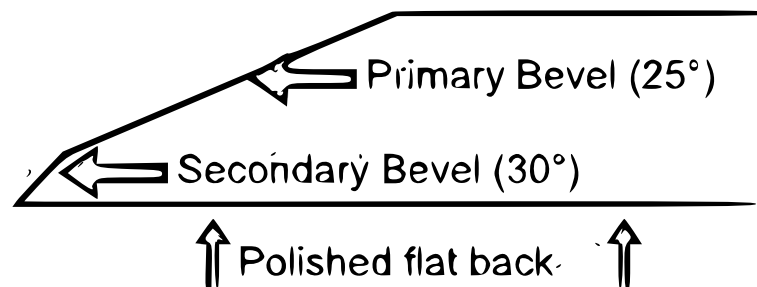
ANATOMY OF THE EDGE

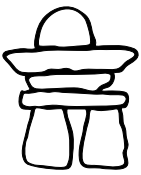
Understanding Bevel Geometry

A truly sharp edge is the intersection of two highly polished, flat planes: the back of the blade and the cutting (Primary) bevel. Adding a micro (Secondary) bevel is a key technique for efficient sharpening.

Common Sharpening Angles

- **Spokeshaves, Chisels, Bench & Low Angle Block Planes:** A 25° primary bevel with a 30° micro-bevel is the common angle used.

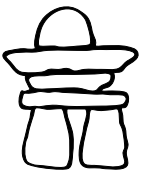




TOOL REQUIREMENTS

Sharpening Overview

- Flatten and polish the back near the cutting edge
- Establish or refresh the primary bevel at the correct angle
- Hone on medium and fine stones
- Add a small micro bevel for quicker repeat sharpening
- Polish the edge, remove the burr, and test sharpness
- Strop if desired for a cleaner final edge



BEST PRACTICES

Technique for Consistent Results

- **Flatten Your Stones:** A dished stone creates a rounded bevel. Use a flattening plate regularly, especially for water stones.
- **Use a Honing Guide:** For beginners and for ensuring perfect consistency, a honing guide is invaluable for locking in precise angles.
- **Light Pressure:** Let the stone do the work. Use lighter pressure as you move to finer grits to avoid creating a large burr.
- **Strop Frequently:** Don't wait until the tool is dull. A few quick passes on a leather strop every 20-30 minutes of use will dramatically prolong the edge's life.
- **Prevent Rust:** After sharpening, wipe the blade dry and apply a light coat of camellia oil or paste wax to protect the bare steel from moisture.