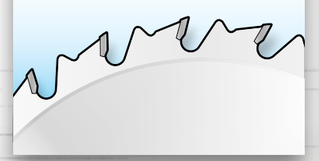
Saw Blades

From the editors of Canadian Woodworking & Home Improvement

BLADE TYPES

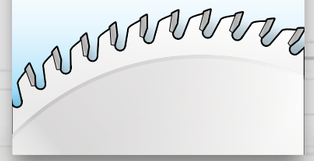
Rip

- Usually FTG teeth
- 20 - 30 teeth per blade
- Has deep gullets
- For cutting with the grain
- Cuts like a chisel giving flat bottomed grooves



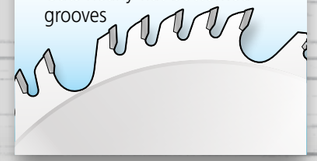
Cross Cut

- Usually ATB teeth
- 60 - 80 teeth per blade
- For cutting across the grain
- Slices like a knife
- Cuts 'V' bottom grooves



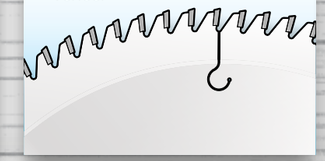
Combination
(General Purpose)

- Usually ATB+R teeth
- 40 – 50 teeth per blade
- Usually has 1 deep gullet, followed by 4 small gullets
- Compromise for ripping and crosscutting
- Cuts nearly flat bottomed grooves



Finish

- Usually Hi-ATB teeth
- 60 - 90 teeth per blade
- Low hook angles reduce tear-out
- For ripping and crosscutting
- Excellent for sheet goods, veneer

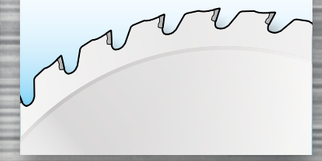


Plywood/Veneer

- FTG or TCG teeth
- 80 – 180 teeth per blade
- Plate generally stamped
- Often thin kerf
- For both table and circular/ track saws

Nail Cutting

- Usually FTG teeth
- 15 - 18 teeth per blade
- Ribbing or vents reduce heat build-up
- Usually thin kerf
- Used with circular saws



Mitre

- ATB or TCG teeth with low or negative rake angle
- 60 - 90 teeth per blade
- For cutting across the grain
- Often thin kerf

Dado

- Two ATB blades with one or more FTG chippers.
- 20-50 teeth on ATB blades, 2-4 teeth on chippers
- Cuts flat bottomed dados
- Generally in 6" or 8" sizes

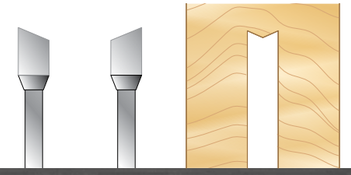
TOOTH STYLES

FTG
(Flat Top Grind)

- Teeth ground flat across the top
- Not as clean cutting as ATB
- Easy to resharpen

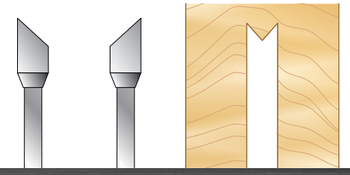
ATB
(Alternate Top Bevel)

- Teeth beveled right to left from 10° to 20°
- Low tear-out
- Easier to chip teeth than FTG



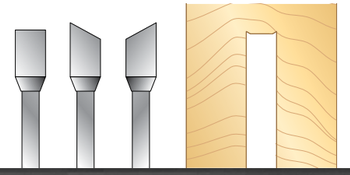
HI-ATB
(High Alternate Top Bevel)

- An ATB with top bevel angles of 30° to 40°
- Delivers the cleanest cuts



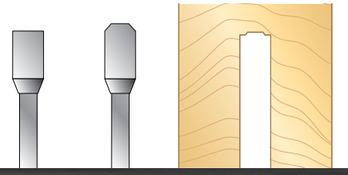
ATB+R (Alternate Top Bevel plus Raker)

- Usually 4 ATB or Hi-ATB teeth with 5th tooth FTG
- Best for brittle material
- Decent option for cutting wood in all directions



TCG
(Triple Chip Grind)

- Flat-ground tooth placed between two teeth with beveled edges
- Blades run cooler
- Best for sheet goods and plastic laminates



BLADE SIZES

Table Saw:
10" To 12"

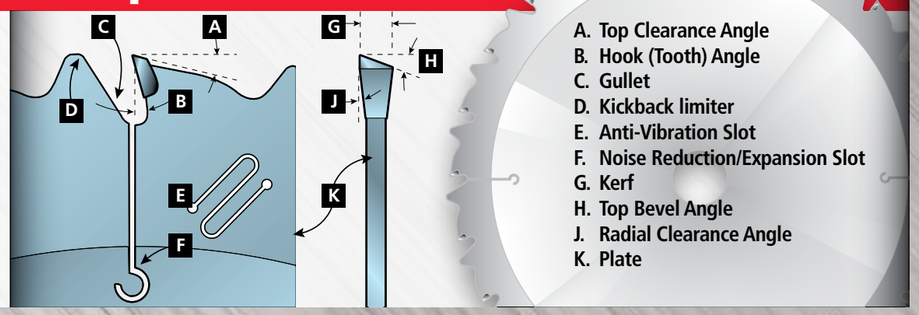
Mitre Saw:
7-1/4" To 12"

Circular/Track Saw:
6-1/4" To 10-1/4"

Plate Anatomy / Tooth Geometry

- Typically high speed steel
- Laser cut (better) or stamped
- Hand (better) or machine tensioned
- Sometimes coated

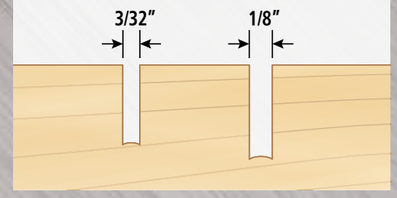
- **Top clearance angles commonly 15°**
- **Hook angles from -5° to 20°**
- **Higher hook angles cut more aggressively, quickly**
- **Radial clearance angle reduce heat build-up**



A. Top Clearance Angle
B. Hook (Tooth) Angle
C. Gullet
D. Kickback limiter
E. Anti-Vibration Slot
F. Noise Reduction/Expansion Slot
G. Kerf
H. Top Bevel Angle
J. Radial Clearance Angle
K. Plate

Thin Kerf

- Kerf is 3/32" wide vs 1/8" for full kerf blade
- Removes less material
- Produces less sawdust
- Puts less strain on saw motor



Coatings

- Decrease friction
- Improve wear resistance
- Reduce corrosion, resin build-up
- Resist heat build-up