

DIAMOND BLADE CUTTING SPEEDS & SAFETY

Things to Consider About Operating Speeds & Safety

Horsepower: High horsepower may require harder bonds and higher diamond concentration. Lower horsepower may require softer bonds and lower diamond concentration.

Shaft Speed: Increasing blade shaft speed makes the diamond blade cut harder. Decreasing shaft speed makes the blade wear faster.

Material Hardness/Abrasive: Harder, less abrasive materials require slower shaft speed. Softer, more abrasive materials require faster shaft speed.

WARNING: Operating saw blades at rotational speeds greater than the maximum RPM can cause blade damage and possibly personal injury.



Walk Behind Wet Blades

Blade Diameter	Maximum Cutting Depth	Recommended Operating Speed RPM	Maximum Safe Speed RPM
12"	3-3/4"	2900	4500
14"	4-3/4"	2900	3900
16"	5-3/4"	2600	3400
18"	6-3/4"	2600	3000
20"	7-3/4"	2450	2700
24"	9-3/4"	1950	2250
26"	10-3/4"	1950	2100
30"	11-3/4"	1650	1800
36"	14-3/4"	1400	1500
42"	17"	1050	1300
48"	20"	850	1100
54"	22-1/2"	775	1000
60"	25-1/2"	625	900
72"	31-1/2"	575	750



Dry Blades



Blade Diameter	Maximum Cutting Depth	Recommended Operating Speed RPM	Maximum Safe Speed RPM
4"	1"	9075	15000
4-1/2"	1-1/4"	8065	13300
5"	1-1/2"	7250	12000
7"	2-1/2"	5175	8725
8"	2-5/8"	4500	7650
10"	2-3/4"	3600	7500
12"	3-3/4"	3400	6300
14"	4-3/4"	3200	5400



Masonry Blades

Blade Diameter	Maximum Cutting Depth	Recommended Operating Speed RPM	Maximum Safe Speed RPM
14"	5"	2550	3900
18"	7"	2300	3000
20"	8"	2300	2900
24"	10"	2300	2800



Wall Saw Blades

Blade Diameter	Maximum Cutting Depth	Recommended Operating Speed RPM	Maximum Safe Speed RPM
18"	6-1/4"	1500	3000
20"	7-1/4"	1500	2700
24"	9-1/4"	1450	2250
30"	12-1/4"	1400	1800
36"	15-1/4"	1300	1500
42"	18-1/4"	950	1300
48"	21-1/4"	850	1100
54"	24-1/4"	700	1000
60"	27-1/4"	625	900
72"	33-1/4"	575	750



Tile Blades

Blade Diameter	Maximum Cutting Depth	Recommended Operating Speed RPM	Maximum Safe Speed RPM
6"	1-3/4"	6050	10175
7"	2-1/4"	5175	8725
8"	2-3/4"	4500	7650
9"	3-1/4"	4025	6800
10"	3-3/4"	3625	6125