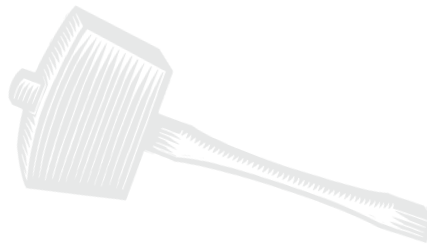
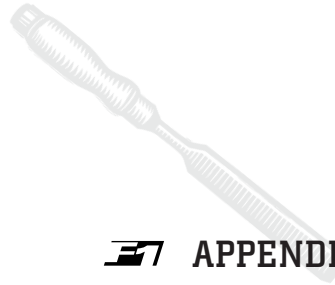
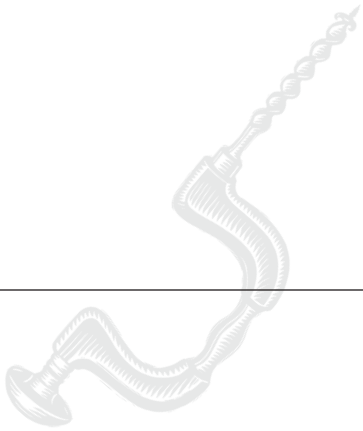
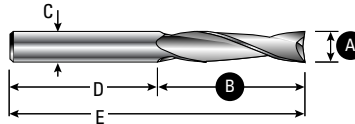
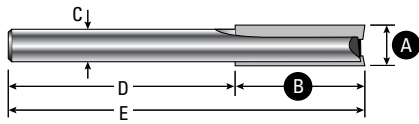
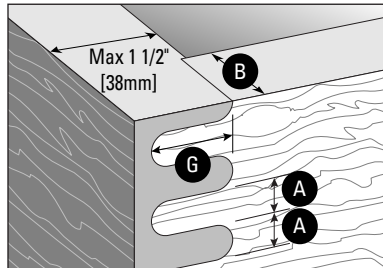
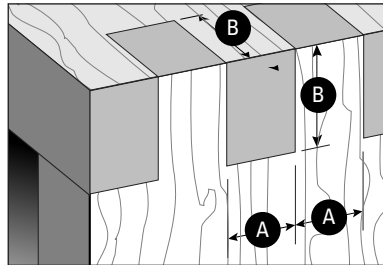


# Cutter Selection and Joint Specification



*Appendix II F1 User Guide***Cutter Selection and Joint Specification**

Virtually any straight router bit may be used for routing box joints or finger joints. There are two types which each have their own advantages and disadvantages. Generally, the high-speed steel (HSS) spiral upcut bits cut cleaner and have less tendency to cause tear-out. They also tend to pull the waste chips up to and around the guidebush, necessitating the occasional cleaning of the guide surfaces. Straight-flute carbide tipped bits spray the waste out horizontally, but they do not cut quite as cleanly. The smallest cutters in both categories are usually single flute straight bits.



“A” is the cutter diameter and equals the nominal size of the finger or socket.  
 “B” is the cutting depth or board thickness, whichever is less.

Check the shank sizes of each cutter selected and use the appropriate collet or collet reducers.  $\frac{1}{4}$ " and  $\frac{3}{8}$ " collet reducers come standard with most  $\frac{1}{2}$ " collet routers. Where 8mm collets are unavailable, use Leigh No.172-8,  $\frac{1}{2}$ " to 8mm collet reducer for all  $\frac{5}{16}$ " and 8mm shank bits.

#### INCH SPECIFICATIONS

LEIGH CUTTER ITEM NO.		A Cutter Dia. Finger Size	B Cutting Depth Range Max. Board Thickness	C Shank Diameter	E Overall Length	F Maximum Board Width	G Max. Rounded Finger Length
Carbide	HSS						
132	162	1/16"	3/16"	1/4"	2	8-7/16"	—
133	163	3/32"	3/8"	1/4"	2	12-9/16"	—
134	164	1/8"	3/8"	1/4"	2-5/8"	8-7/16"*	—
135	165	5/32"	5/8"	1/4"	2-7/8"	10-1/2"	—
136	166	3/16"	5/8"	1/4"	2-7/8"	12-9/16"	—
138	168	1/4"	3/4"	1/4"	3	8-7/16"*	1-1/8"
140-8	170	5/16"	7/8"	8mm & 5/16"	2-3/4"	10-1/2"	1-1/4"
143	173	3/8"	1	3/8"	3	12-9/16" to 22-29/32"***	1-3/8"
160	180	1/2"	1-1/4"	1/2"	3-1/2"	14-21/32" to 23-13/16"***	1-3/8"

\*  $\frac{1}{4}$ " and  $\frac{1}{8}$ " box joints may be routed up to 14" widths on the  $\frac{1}{2}$ " comb.

\*\* See Chapter 11 for wider box joints.

Leigh does not stock metric sized cutters. Please contact your national distributor for Leigh.

#### METRIC SPECIFICATIONS

A Finger Size Cutter Dia.	B Cutting Depth Range Max. Board Thickness	C Shank Diameter	E Overall Length	F Maximum Board Width	G Max. Rounded Finger Length
2	6	8	60	260	—
3	9	8	70	600	—
4	12	8	70	260	—
5	16	8	70	340	—
6	19	8	70	600	—
8	22	8	75	260 to 499**	32
10	25	8	75	340 to 580**	35
12	32	8	75	600	35
12	35	12	90	600	35

\*\* See Chapter 11 for wider box joints.

