

T-FLANGE FRAME OPTION

Maximum Free Area - Low Pressure Drop Damper Frame

Use with TDC, TDF, Ductmate, Nexus, Ward and Other T-Flange Duct Connections

The T-Flange frame is designed for easy installation in small duct applications. The frame mates to TDC, TDF, Ductmate, Nexus, Ward and other T-Flange duct connections.

T-Flange is available at no additional cost for the following control damper models:

CD50 CD504 CD40 CD403 CD51

T-Flange frame is available at additional cost for the following Ruskin commercial control damper models:

CD60 CD36 CD356

IL35 CD35 CD355

MINIMUM SIZE

Models CD50, CD504, CD60, CD356 and CD355, 6" x 4" (152 x 102).

Models CD36, CD35, IL35, CD40 and CD403, 4" x 4" (102 x 102).

Model CD51, 6" x 5" (152 x 127).

MAXIMUM SIZE

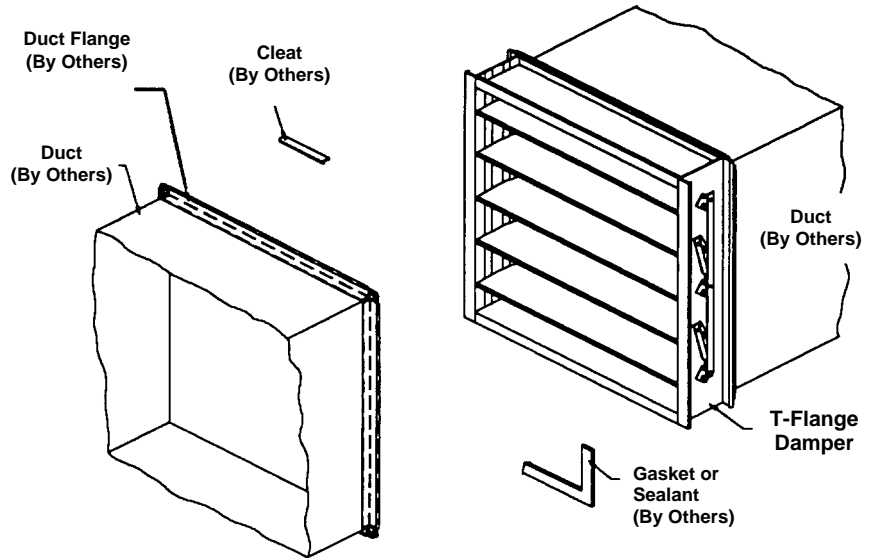
Models CD50, CD504, and CD60, 60" x 72" (1524 x 1829).

Models CD36, CD35, IL35, CD51, CD40, CD356, CD35, and CD403, 48" x 72" (1219 x 1829).

See back of page for more dimensional and specification information.

Note:

Dimensions shown in parentheses () indicate millimeters.



FEATURES

- The unique T-Flange frame provides up to 65% more free area on small damper applications. This results in lower pressure drop and improved system performance.
- The T-Flange 4-bolt and/or flange cleat installation eliminates the need to seal the damper frame to the inside of the duct as required on conventional low leakage damper frames.
- Close tolerance construction allows only a maximum leakage of 1 cfm through the frame at 10" w.g. static pressure per 6" (152) of damper height.
- Noise through the frame is less than NC 35 based on 10 db attenuation and 10 db room effect.
- Actuator out of the airstream design provides easy field connection and low pressure drop performance.

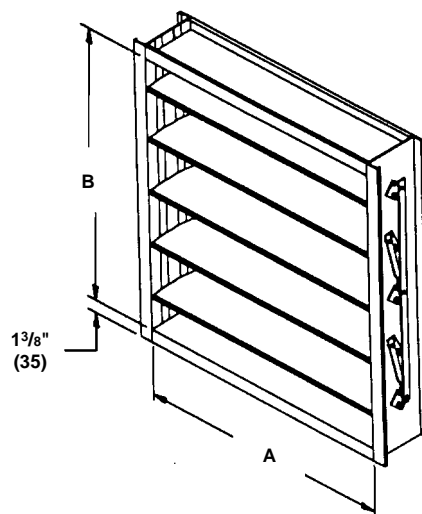
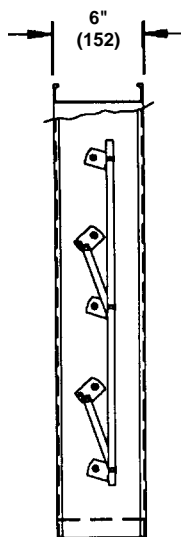
T-FLANGE SUGGESTED SPECIFICATIONS

Insert the following frame specification in lieu of the standard frame specification for Ruskin control damper models CD50, CD504, CD40, CD51, CD60, CD36, CD35, IL35, CD356, CD355 or CD403. See individual model specification sheet for complete specification.

Furnish and install, at locations shown on plans or in accordance with schedules, control dampers that meet the following minimum

construction standards: Frame shall be 6" x 1.375" x .125" (152 x 35 x 3.18) aluminum T-Flange type with bolt holes in corners. Frame shall be designed for 4-bolt and/or flange cleat installation. Frame shall provide maximum free area for lowest pressure drop performance.

DIMENSIONAL AND PERFORMANCE INFORMATION



Note: The T-Flange frame includes a 1³/₈" (35) mating flange designed to match most duct flange systems. Contact Ruskin if the duct flange system is not a 1³/₈" (35) design.

Order dampers actual duct size.

Free Area and Pressure Drop Comparison

Example based on 7" x 6¹/₂" (178 x 165) duct size.

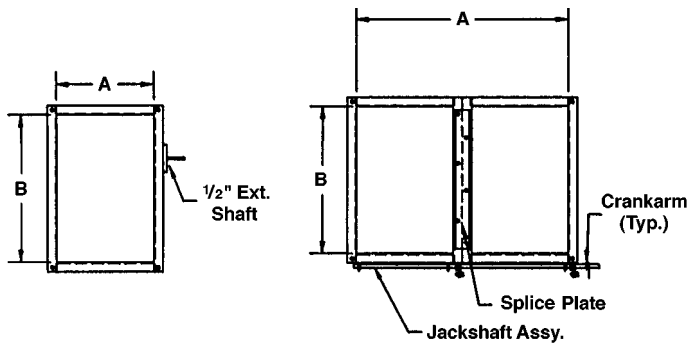
Ruskin Model CD50 with T-Flange style frame:	
Total Damper Free Area =	33 sq. in.
Free Area % =	72.5%
Pressure Drop* at 1500 fpm duct velocity =	.06" w.g.
Pressure Drop* at 2000 fpm duct velocity =	.09" w.g.

Ruskin Model CD36 with standard in duct style frame:	
Total Damper Free Area =	16.6 sq. in.
Free Area % =	43%
Pressure Drop* at 1500 fpm duct velocity =	.26" w.g.
Pressure Drop* at 2000 fpm duct velocity =	.45" w.g.

*Pressure Drop based on AMCA 500 test setup Figure 5.3 duct upstream and downstream of damper.

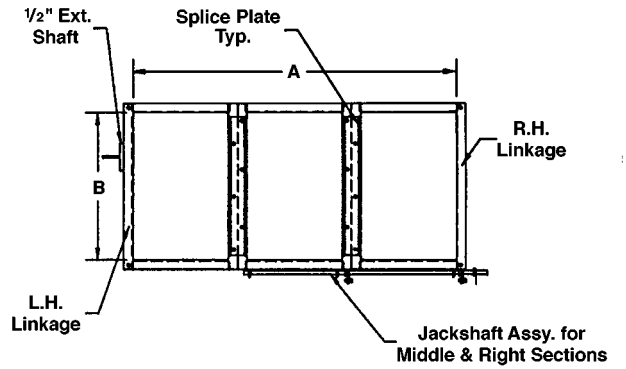
Note: Dimensions shown in parentheses () indicate millimeters.

MULTI-SECTION ASSEMBLY DETAILS FOR T-FLANGE FRAME DAMPERS WITH SINGLE SKIN BLADES

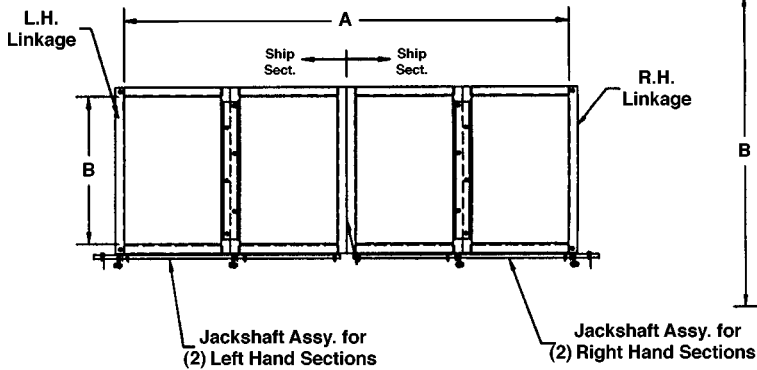


DETAIL 11
(48" x 72" Max.)

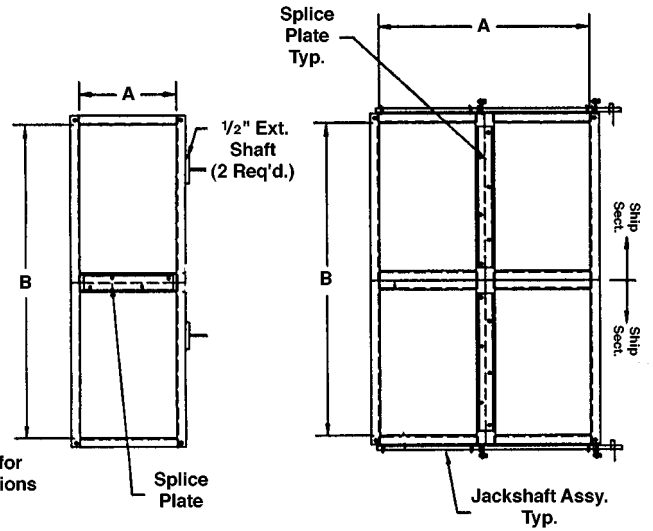
DETAIL 21
(96" x 72" Max.)



DETAIL 31
(144" x 72" Max.)

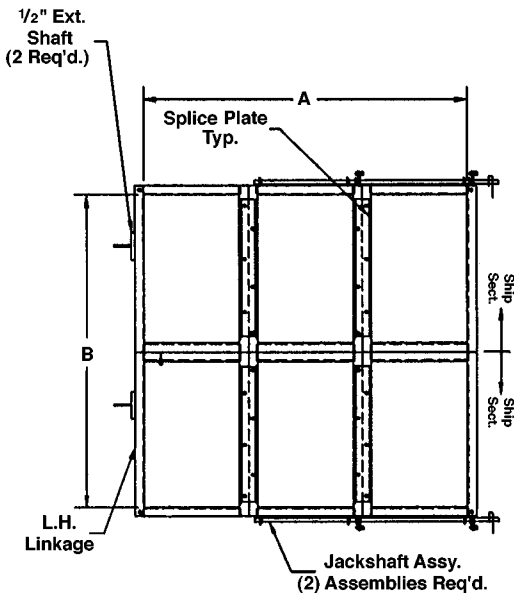


DETAIL 41
(192" x 72" Max.)

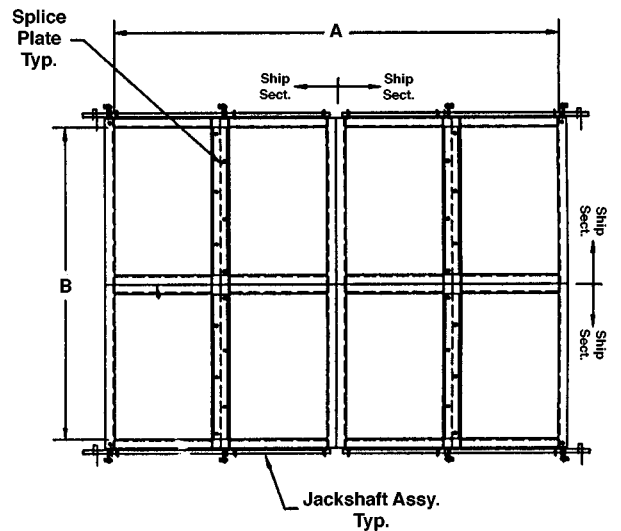


DETAIL 12
(48" x 144" Max.)

DETAIL 22
(96" x 144" Max.)

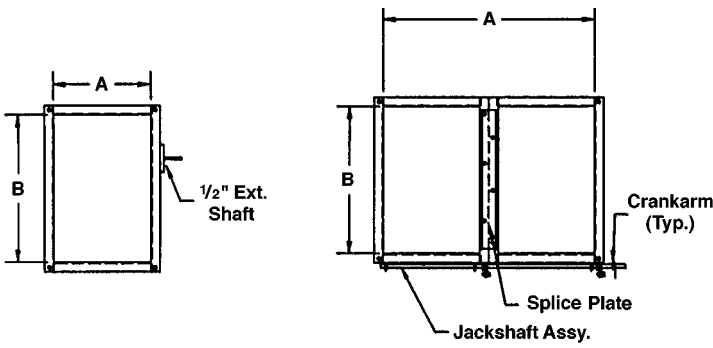


DETAIL 32
(144" x 144" Max.)

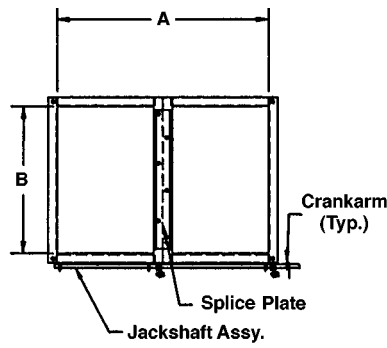


DETAIL 42
(192" x 144" Max.)

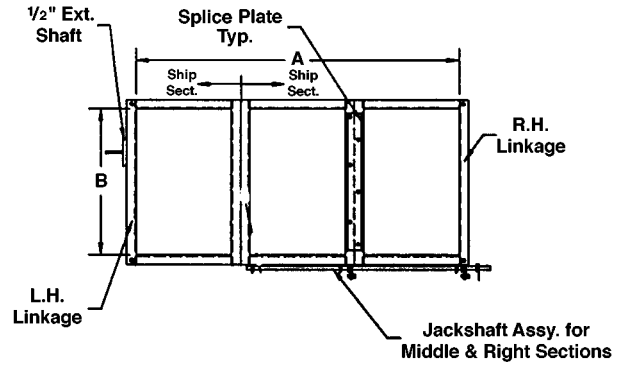
MULTI-SECTION ASSEMBLY DETAILS FOR T-FLANGE FRAME DAMPERS WITH AIRFOIL BLADES



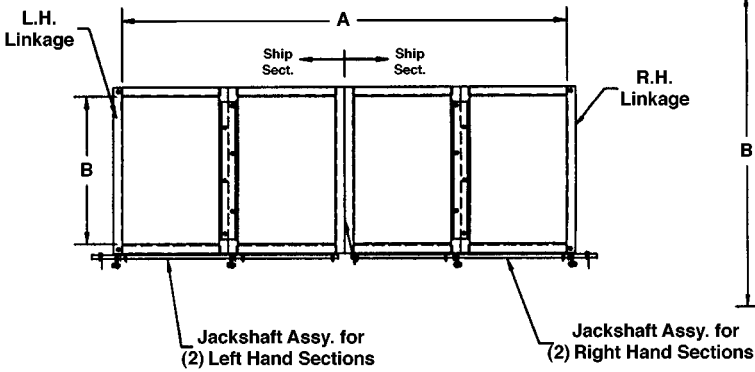
DETAIL 11
(60" x 72" Max.)



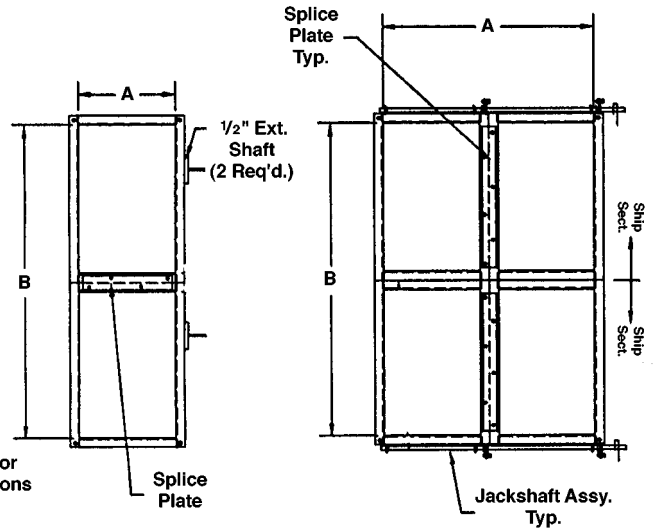
DETAIL 21
(120" x 72" Max.)



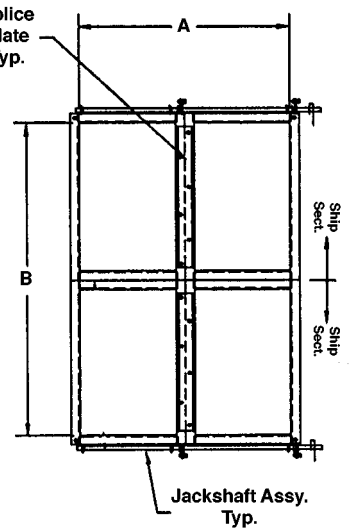
DETAIL 31
(180" x 72" Max.)



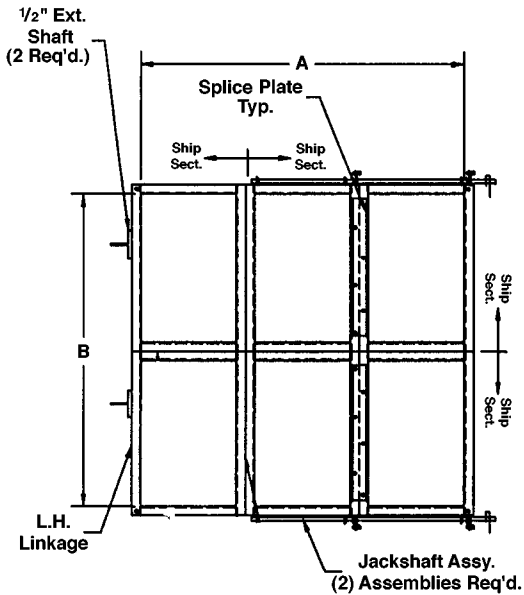
DETAIL 41
(240" x 72" Max.)



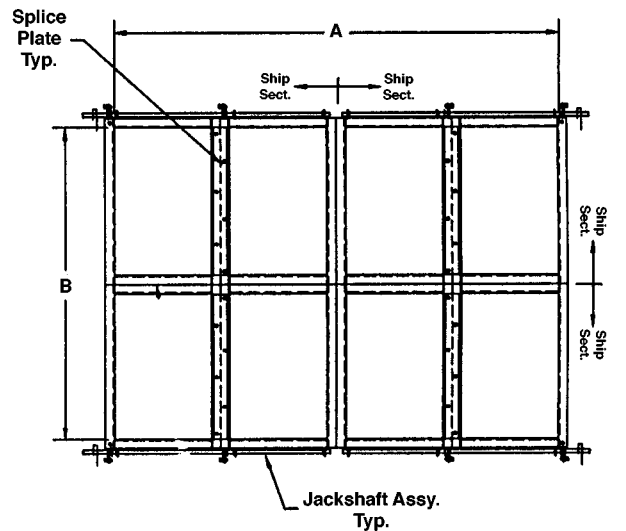
DETAIL 12
(60" x 144" Max.)



DETAIL 22
(120" x 144" Max.)



DETAIL 32
(180" x 144" Max.)



DETAIL 42
(240" x 144" Max.)