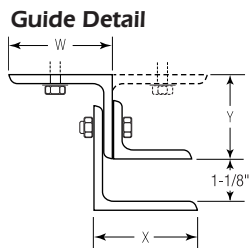
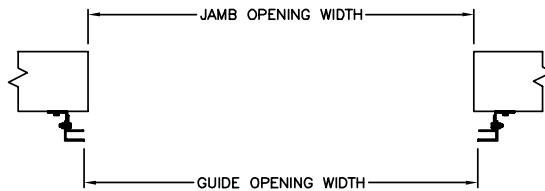
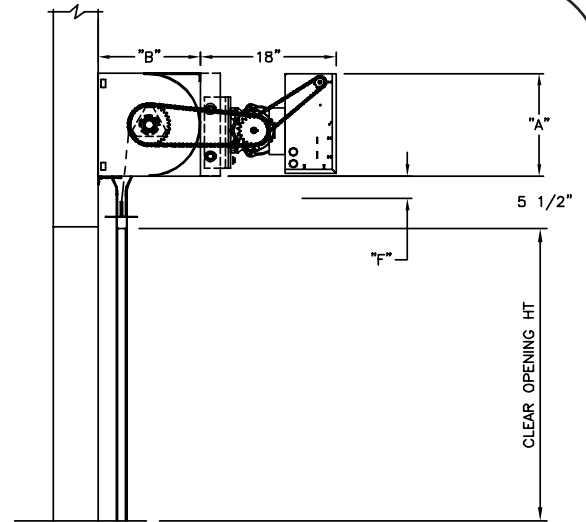
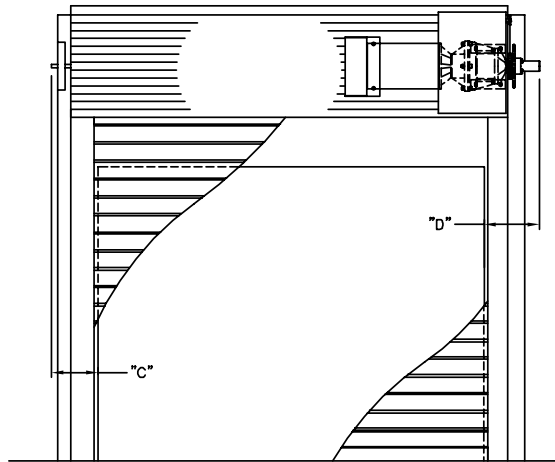


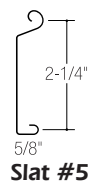
Auto Test Doors

Type FDO-B - Motor Operated Fire Door

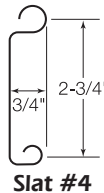
FinalCote Tan Finish - Face of Wall Mounted - Smoke Detector Activated



Slat Selection



Slat #5

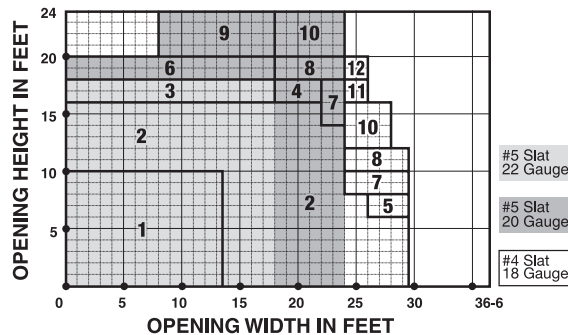
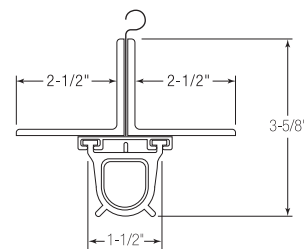


Slat #4

Determine Dimensions For Specific Door Size

1. From chart below select proper Area Number for width and height of door.
2. Refer to Selection Chart for dimensions.

Bottom Bar Detail



AREA	COMPONENT DIMENSIONS				
	A	B	F	W	Y
1	13.0"	14.0"	1.5"	2.5"	2.5"
2	15.0"	16.0"	0.0"	2.5"	2.5"
3	16.0"	17.0"	0.0"	2.5"	3.0"
4	16.0"	17.0"	0.0"	3.0"	3.0"
5	16.0"	17.0"	0.0"	2.5"	2.5"
6	18.0"	19.0"	0.0"	2.5"	3.5"
7	18.0"	19.0"	0.0"	3.0"	3.0"
8	18.0"	19.0"	0.0"	3.0"	3.5"
9	20.0"	21.0"	0.0"	2.5"	3.5"
10	20.0"	21.0"	0.0"	3.0"	3.5"
11	20.0"	21.0"	0.0"	3.0"	4.0"
12	22.0"	23.0"	0.0"	3.0"	4.0"

DOOR WIDTH	X	C	D
UP TO 8'	2.5"	6.0"	8.5"
OVER 8'	3.0"	6.5"	9.5"

Dimensions are based on the requirements of Warnock Hersey testing agency. If UL or FM labels are required, dimensions C, D, W, X, Y may be greater than shown. Please contact factory for proper dimensions.



Auto Test Doors

Type FDO-B - Motor Operated Fire Door

FinalCote Tan Finish - Face of Wall Mounted - Smoke Detector Activated

1.0 GENERAL

1.1 Summary

- A. All Rolling Fire Doors shall be as manufactured by The Cookson Company, Phoenix, Arizona. Furnished materials shall include all curtains, bottom bars, guides, brackets, hoods, operating mechanisms and any special features.
- B. Work not to be included by The Cookson Company includes design of, material for and preparation of door openings but not limited to structural or miscellaneous iron work, access panels, finish painting, electrical wiring, conduit and disconnect switches.

1.2 Quality Assurance

- A. All rolling fire doors shall be constructed in accordance with the testing agency, Warnock Hersey, requirements and shall bear a [4 hour] [3 hour] [1-1/2 hour] [3/4 hour] rating label. Firelocks shall be installed on doors over 13'7" wide but not exceeding 29'7" wide to positively hold the curtain in the guides.

2.0 PRODUCTS

2.1 Materials

- A. The door curtain shall be constructed of interconnected strip steel slats conforming to ASTM A-653. The proper gauge of steel shall be chosen as follows:
 - 1. 22 gauge with a No. 5 (measuring 2-1/4" high by 5/8" deep) flat slat as designated by The Cookson Company if the door width does not exceed 18'4" and the door height does not exceed 18'4".
 - 2. 20 gauge with a No. 5 flat slat as designated by The Cookson Company if the door width is between 18'5" and 24'4" and the door height is between 18'5" and 24'4".
 - 3. 18 gauge No. 4 (measuring 2-3/4" high by 3/4" deep) flat slat as designated by The Cookson Company if the door width exceeds 24'4" and or the door height exceeds 24'4".
- B. The finish on the door curtain shall be Cookson FinalCote consisting of the following:
 - 1. Hot dipped galvanized G-90 coating consistent with ASTM A-653
 - 2. Bonderized coating for prime coat adhesion
 - 3. Corrosion inhibiting primer .2 mils per side
 - 4. Thermo-setting tan polyester top coat with a minimum thickness of .6 mils each side
- C. The bottom bar shall consist of two 1/8" steel angles mechanically joined together and shall include the Cookson Featheredge safety edge system. The finish on the bottom bar shall be one (1) coat of bronze rust-inhibiting prime paint.
- D. The guides shall consist of 3 steel angles bolted together with 3/8" fasteners to form a channel for the curtain to travel. The wall angle portion shall be continuous and fastened to the surrounding structure with minimum 1/2" fasteners. The finish on the guide angles shall be one (1) coat of bronze of rust-inhibiting prime paint.
- E. The brackets shall be constructed of steel not less than 1/4" thick and shall be bolted to the wall angle with minimum 1/2" fasteners. The finish on the brackets shall be one (1) coat of bronze rust-inhibiting prime paint.
- F. The barrel shall be steel tubing of not less than 4" in diameter. Oil tempered torsion springs shall be capable of correctly counter balancing the weight of the curtain. The barrel shall be designed to limit the maximum deflection to .03" per foot of opening width. The springs shall be adjusted by means of an exterior wheel. The finish on the barrel shall be one (1) coat of bronze rust-inhibiting prime paint.
- G. The hood shall be fabricated from 24 gauge galvanized steel and shall be formed to fit the curvature of the brackets. The finish on the hood shall be the Cookson FinalCote finish as indicated in the curtain section.

2.2 Operation

- A. All motor operated fire doors shall have model FDO-B motor operator which shall become operational upon the activation of the fire alarm or smoke detection system. The door shall have the Soft-Close governing device to provide a constant closing speed of not less than six (6) inches per second and not more than nine (9) inches per second as outlined in NFPA Bulletin 80. Once the door has closed, it can be reset by clearing the alarm system and pushing the up control station. Mechanical resetting shall never be required.
- B. The door shall be operated at a speed of 2/3 foot per second by an open drip-proof electric motor with gear reducer in oil bath. The motor operator shall include a geared limit switch. The motor starter shall be housed in a NEMA 1 housing and include a 24 volt control transformer, a solid state control circuit board, and

complete terminal strip to facilitate field wiring. The motor operator shall be activated by [a 3 button push-button station] [other controls as selected] in a NEMA 1 enclosure. The motor shall be size as required by the door [115 volts single phase][230 volts three phase][460 volts three phase]. The motor operator shall be mounted to the door bracket as shown on drawings. All motor operators and controls shall be U.L. listed for use with fire doors.

- C. The fire door shall include the Featheredge rolling door safety edge system as manufactured by The Cookson Company and shall include the following features.
 - 1. The Featheredge shall be installed on the bottom bar of the door and shall automatically reverse the door if the device detects an obstruction in the downward travel of the door.
 - 2. The Featheredge shall consist of a rubber boot attached below the bottom bar with an electrical switch secured to the back of the bottom bar. The Featheredge shall operate with air wave technology and shall not rely on pneumatic pressure or electrical strip contacts to operate properly. The Featheredge shall create an air wave that shall be detected and reverse the direction of the rolling door.
 - 3. The operation of the Featheredge shall not be subject to interferences by temperature, barometric pressure, water infiltration, or cuts in the rubber boot.
 - 4. The Featheredge shall be connected to the motor operator with a coil cord.
- D. Fire doors shall be controlled by Cookson FDO-B motor operator. This motor operator shall allow for the testing of fire doors without ever mechanically resetting the release mechanism. The motor and controls shall be U.L. approved for use with fire doors. The control panel shall be wired directly into the building's (110 volt AC) (24 volt AC) (24 volt DC) fire alarm or smoke detector system.
 - 1. Upon activation of the alarm system, the FDO-B speaker strobe light shall flash and the voice module shall warn occupants that the fire door will close.
 - 2. The door shall be powered down by the motor operator until the door reaches the fully closed position at which time the strobe light shall stop flashing. If there is an obstruction in the opening, the door shall automatically open, activate the voice module and close again. The Featheredge shall continue to cycle the door up and down until the obstruction is removed and the door can fully close or the door has cycled 3 times, in which case the door shall stop on the obstruction. If at any time the obstruction is removed, with the continuation of the alarm signal, the door will continue to a fully closed position at which time the strobe light will stop flashing.
 - 3. During a power failure, the door will remain open unless there is an alarm condition. An integral, uninterruptible power source will maintain the system for a minimum of 7 days. A power monitoring relay will close the door and keep it closed if the battery power is not sufficient to control the door through a down cycle. In an alarm condition, Cookson's Soft-Close RPM governing system will limit the speed of the closing door to not less than 6" per second and not greater than 9" per second. The Featheredge shall remain operable even during a power failure and stop the door if it contacts an obstruction. The close and stop control buttons shall remain operable during a power failure, allowing the door to be closed and stopped at any position. The door will automatically reset and the uninterruptible power source charge with the resumption of power and the activation of the opening device.
 - 4. To reset the fire door, clear the alarm system and push the up control station. The fire door shall never need to be mechanically reset and testing can be performed by any individual by activating the alarm system.
 - 5. Testing shall be performed by activating the alarm system or using the Test Key Station that is provided. Once the door has closed, clear the alarm and push the up control station. Interruption of normal power shall not cause the door to close. The fire door shall never need to be mechanically reset. The FDOB system shall also have a battery test circuit which will allow the testing of the uninterruptible power source.

3.0 EXECUTION

3.1 Installation

- A. All Cookson Rolling Fire Doors shall be installed in accordance with NFPA Bulletin 80 by an authorized Cookson Distributor.

3.2 Warranty

- A. All Cookson Rolling Fire Doors shall be warranted for a period of 2 years from the time of shipment against defects in workmanship and materials.