RITE Touch®
RT1050D Digital Glass Door Lock

The surface-mounted RITE Touch RT1050D provides flexible, keyless access control for single or double all-glass doors.

Function
The RITE Touch RT1050D is a digital door lock that provides keyless access control for all-glass openings. The RITE Touch offers sophisticated styling, convenience, flexible access control, and safety and security for single or double glass doors. Perfect for indoor applications, the easy to install surface-mounted RITE Touch RT1050D combines elegant aesthetics with the latest touch screen technology, to harmonize style and security.

Features
- Battery-operated lock uses 4 AA alkaline batteries
- Expected battery life is 1 year based on 10 daily uses
- Operating temperature 5°F to 130°F (-15°C to 55°C)
- Programming via touch-screen
- RITE Touch will support up to 40 credential cards (extra cards available separately)

Operation
The surface-mounted lock features two options for credential actuation on the secure side of the door: either by entering a user code using a touch-screen or by using provided Mifare credential cards. The lock features dual unlock from the inside of the door, either by thumbturn or by using an override button.

Specifications
DOOR THICKNESS
- 7/16" to 1/2" thick glass doors, indoor applications only.

LOCK BODY
- The RITE Touch RT1050D comes in an elegant mirrored finish.
- Front Body: 9/16" x 2-7/8" x 7-5/16"
- Back Body: 1-15/16" x 3-1/16" x 7-1/2"

BOLT
- Twin bolts measuring 13/32" diameter with 1-1/8" throw. Bolt Extensions included separately in standard package for larger door gap, including twin bolts with 2-1/8" throw.

STRIKE
- Surface-mounted strike plate for double glass doors provided.

OPTIONS
- The RITE Touch RT1050D is designed for single or double glass doors. The surface-mounted strike is provided for double door applications. Extra credential cards available in packs of 5.

STANDARD PACKAGE
- Individually boxed with mounting plate, AA batteries (x4), credential cards (x4), single door magnet, bolt extensions, thin door plate, and mounting screws. Shipping weight: 6 lbs.
Dimensions

HOW TO ORDER RT1050D RITE TOUCH DIGITAL GLASS DOOR LOCK
Specify quantity and the following information.

<table>
<thead>
<tr>
<th>RITE TOUCH</th>
<th>MODEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>RITE</td>
<td>1050D</td>
</tr>
</tbody>
</table>

1050D For single or double doors

RELATED PRODUCTS When purchasing this product, please consider the following related products, available separately:

Accessories
Extra credential card 5 pack (RT-5C-1050).
1830 Bottom Rail Deadlock (Swing Bolt)

The 1830 Bottom Rail Deadlock provides bottom rail locking in ultra-narrow stile or tempered glass doors. Tamper-proof with an armored faceplate, it protects with a minimum threshold strike opening.

Function
For bottom rail locking of ultra-narrow stile or tempered glass doors whose bottom rail (shoe) is too shallow for the MS1861 Bottom Rail Deadbolt (see DEADLOCKS). Mechanism is that of the MS1850 Deadlock, but with the bolt size reduced. This keeps the threshold strike opening to a practical minimum, avoiding collection of debris or snagging on high-heeled shoes. Armor faceplate protects cylinder setscrews from tampering and keeps them from loosening. Not applicable to wood doors.

Specifications

**CYLINDER HEIGHT (BACKSET)**
- 31/32” and 1-1/8” only.

**CASE**
- Steel with corrosion-resistant plating, measures 1” x 6” x depth (depth varies with cylinder height).

**BOLTS**
- 15/32” x 5/8” x 2-1/8” with 5/8” throw. Six-ply laminated steel with eight plys within case. Center ply has alumina-ceramic core to deter hacksaw attack.

**STRIKE**
- See back page for dimensions of strike slot which can be cut in metal thresholds. 4006 strike (shown) is available separately, with stainless steel trim plate and plastic box.

**CYLINDER CAM**
- 1830 Bottom Rail Deadlocks are operable by any standard 1-5/32” diameter mortise cylinder with MS® cam, dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.

**OPTIONS**
- Specify either 31/32” or 1-1/8” cylinder height (see dash table). 4006 strike and cylinder(s) available separately, if required.

**STANDARD PACKAGE**
- Individually boxed with machine screws for mounting. Cylinders and/or thumbturns are available separately. Shipping weight: 1-1/2 lbs.
Dimensions

Stile & Threshold Preparation

4006 Strike Dimensions

Lock & Cylinder Installation

HOW TO ORDER 1830 BOTTOM RAIL DEADLOCK  Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>DASH NO.</th>
<th>CYLINDER HEIGHT</th>
<th>DIM. A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1830</td>
<td>-02</td>
<td>31/32&quot;</td>
<td>1-5/8&quot;</td>
</tr>
<tr>
<td></td>
<td>-03</td>
<td>1-1/8&quot;</td>
<td>1-25/32&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>628 Clear Anodized</td>
</tr>
<tr>
<td>313 Dark Bronze Anodized</td>
</tr>
</tbody>
</table>

RELATED PRODUCTS  When purchasing this product, please consider the following related products, available separately:

Accessories
- 4006 strike.
- Cylinder guards.

Cylinders
- 1830 Bottom Rail Deadlocks are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam.
MS1837 Series MS® Two-Point Deadlock

Maximum security for wood door pairs is provided with the MS1837 Two-Point Deadlock. A single turn drops a bolt into the threshold and pivots the MS bolt.

Function

Maximum security for wood door pairs by a single turn of a key is provided with the MS1837. Simultaneously dropping a stainless steel hexbolt into the threshold and pivoting the massive MS bolt into the opposite leaf, the MS1837 eliminates inconvenient and sometimes forgotten flushbolts in the inactive leaf.

Operation

360° turn of key or thumbturn throws counterbalanced bolt into opposite door and drops bolt into threshold. Key can be removed only when bolts are in a positively locked or unlocked position. Lock accepts any standard 1-5/32” diameter mortise cylinder from either or both sides. Cylinder must have MS® dimensioned cam.

Specifications

CYLINDER BACKSET
• 1-1/2” only.

CYLINDER HEIGHT
• 36” standard. Other heights available on special order.

CASE
• Steel with corrosion-resistant plate, measures 1” x 6” x 2-3/16”.

PIVOTED BOLT
• 5/8” x 1-3/4” x 2-7/8” with 1-3/8” throw. Eight-ply laminated steel with alumina-ceramic core to deter hacksaw attack.

THRESHOLD BOLT
• Hexagonal 3/8”, flat to flat. Stainless steel.

ARMORED FACEPLATE
• Flat, two-piece plate extends to bottom of door. Standard finish is US26 (628) Clear Anodized.

STRIKE
• For MS bolt, a 4001-011 strike plate with dust box is furnished. Threshold bolt strike can be 1/2” diameter hole in metal threshold or, if threshold is wood, 4005 strike is available as an option.

CYLINDER CAM
• 1837 Two-Point Deadlocks are operable by any standard 1-5/32” diameter mortise cylinder with MS® cam, dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.

STANDARD PACKAGE
• Basic MS lock individually boxed with mounting screws. Hexbolt and rod packed separately with face extension plate, screws, bottom bolt guide, and attachment pin. Cylinders and/or thumbturns available separately. Shipping weight: 3 lbs.
When purchasing this product, please consider the following related products, available separately:

Accessories
- Cylinders

4005 trim strike for wooden threshold.

MS1837 Two-Point Deadlocks are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam.
**MS1847 Series MS® Deadlock/Deadlatch**

The MS1847 Deadlock/Latch for ultra-narrow stile siding doors features a self-protecting bolt with adjustable bolt projection.

**Function**

A compact lock designed to fit within very narrow sliding door stiles without compromising the high degree of security these doors need. The sturdy stainless steel bolt has two important features not usually found in sliding door hardware. First, it is adjustable: a full 3/16" lengthening or shortening of bolt projection is possible by turning an exposed screw in the face of the lock. This can compensate for considerable misalignment between door and jamb. Second, the MS1847 bolt is self-protecting: if the door is closed with the bolt in the locked position, the bolt will retract immediately on contact with the jamb, thus preventing damage or accidental lock-out.

**Operation**

Can be operated by a standard cylinder, so the glass door may be keyed-in with other types of doors. Three hub slot positions allow installation even where jamb and stile design provides severely limited turn clearance.

**Specifications**

**LATCH VERSION**
- The same stainless steel hookbolt, but spring-loaded for automatic latching, is provided by the MS1847-11 and MS1847-13. *All dimensions and available accessories for the MS1847 deadlocks also apply to MS1847 deadlatches.*

**CASE**
- Stainless steel, measures 1/2" x 3-3/16" x 1-1/8".

**ANTI-LIFT BOLT**
- Three-ply laminated stainless steel. Designed to withstand approximately one-half ton force, either horizontal or vertical. Anti-lift bolt stops both door-from-jamb pry bar attacks and attempts to lift the door from its track.

**FACE**
- Rectangular or full radius ends (see table on back of page for dash numbers).

**STANDARD PACKAGE**
- Case-packed with machine screws for mounting. Shipping weight: 1/3 lb.
**Dimensions**

```
Dimensions

1-1/8"  28.6mm
5/32"   4mm
3/32"  2.4mm
3/8"   9.5mm
1/4" R  6.4mm
3/16"  4.8mm
3-3/16" 9.5mm
3-11/16" 93.7mm
3-7/32" 81.8mm
3-3/8"  9.5mm
```

**Stile Preparation**

```
Stile Preparation

DRILL AND CSK FOR #6 SCREW (2 PLCs)
SEE DASH NUMBER FOR SQUARE OR RADIUS ENDS
NOTE: DIMENSIONS SHOWN ARE RECOMMENDED MINIMUM
```

**Installation**

```
Installation

LOCK & STILE
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**HOW TO ORDER MS1847 SERIES MS® DEADLOCK/DEDLATCH**

Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>FACE SHAPE, HUB ANGLE, LOCK OR LATCH</th>
<th>FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS1847-02</td>
<td>-630</td>
<td>Satin Stainless</td>
</tr>
</tbody>
</table>

**RELATED PRODUCTS**

When purchasing this product, please consider the following related products, available separately:

- **Accessories**
  - Trim strikes.

- **Cylinders**
  - Turns and cylinder pulls.
Specifications

**CYLINDER BACKSET**
- 7/8", 31/32", 1-1/8", or 1-1/2" only.

**CASE**
- Steel with corrosion-resistant plating, measures 1" x 6" x depth. Depth varies by backset (see table on back of page).

**BOLT**
- 5/8" x 1-3/8" x 2-7/8" with 1-3/8" throw. Eight-ply laminated stainless steel. Center ply has alumina-ceramic core to defeat any hacksaw attack, including rod-type “super” hacksaws.

**FACEPLATE**
- Measures 1" x 6-7/8"

**STRIKE**
- See back of page for dimensions of strike slot which can be cut in metal jamb. Trim plate, box strike, and armored strike are available separately.

**CYLINDER CAM**
- MS1850S Deadlocks are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.

**OPTIONS**
- For jambs too narrow to accept the long bolt, the MS1850S-050 offers a shorter bolt with hook shape to provide equal security against door-prying attempts. MS1850S-020 short throw without hook is also available. Second and third point locking bolts are available for pairs of doors. All use any make standard mortise cylinder and thus can be keyed into systems with other types of doors. “SCHOOLHOUSE” version, also available, is modified so that operation from inside is “unlock only”. This lock is handed and must be specified LH or RH. Specify Series SCH1850S. Same faceplate and backset options as Series MS1850S. Operation from inside, with standard Adams Rite 4066 Turn or with 4550 Deadlock Lever. For wood or hollow metal, see MS1850SN.

**STANDARD PACKAGE**
- Individually boxed with machine screws for mounting. Cylinders and/or thumbturns available separately. Shipping weight: 1-1/2 lbs.
Dimensions

HOW BACKSET IS MEASURED:

- SHOWN WITH FLAT FACEPLATE
- BACKSET MEASURED AT CENTERLINE OF STILE NOSE

LOCK & CYLINDER CUTOUT

<table>
<thead>
<tr>
<th>BACKSET</th>
<th>”A”</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8”</td>
<td>1-9/16”</td>
</tr>
<tr>
<td>31/32”</td>
<td>1-5/8”</td>
</tr>
<tr>
<td>1-1/8”</td>
<td>1-25/32”</td>
</tr>
<tr>
<td>2-1/4”</td>
<td>2-1/4”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ARMORED FACEPLATE 1” X 6-7/8”</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAT MS1850S</td>
</tr>
<tr>
<td>RADIUS MS1851S</td>
</tr>
<tr>
<td>RADIUS W/ WEATHERSTRIP MS1851SW</td>
</tr>
<tr>
<td>LH BEVEL MS1852S-X15</td>
</tr>
<tr>
<td>RH BEVEL MS1852S-X16</td>
</tr>
</tbody>
</table>

Stile Preparation

<table>
<thead>
<tr>
<th>BACKSET</th>
<th>”A”</th>
</tr>
</thead>
<tbody>
<tr>
<td>29/64”</td>
<td>11.5mm</td>
</tr>
<tr>
<td>6-5/64”</td>
<td>17.5mm</td>
</tr>
<tr>
<td>1-9/32”</td>
<td>3.5mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FACEPLATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAT MS1850S</td>
</tr>
<tr>
<td>RADIUS MS1851S</td>
</tr>
<tr>
<td>RADIUS W/ WEATHERSTRIP MS1851SW</td>
</tr>
<tr>
<td>LH BEVEL MS1852S-X15</td>
</tr>
<tr>
<td>RH BEVEL MS1852S-X16</td>
</tr>
</tbody>
</table>

Lock & Cylinder Installation

<table>
<thead>
<tr>
<th>BACKSET</th>
<th>”A”</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/16”</td>
<td>36mm</td>
</tr>
<tr>
<td>1-9/16”</td>
<td>23mm</td>
</tr>
<tr>
<td>1-3/8”</td>
<td>34.9mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FACEPLATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAT MS1850S</td>
</tr>
<tr>
<td>RADIUS MS1851S</td>
</tr>
<tr>
<td>RADIUS W/ WEATHERSTRIP MS1851SW</td>
</tr>
<tr>
<td>LH BEVEL MS1852S-X15</td>
</tr>
<tr>
<td>RH BEVEL MS1852S-X16</td>
</tr>
</tbody>
</table>

HOW TO ORDER MS1850S SERIES MS® DEADLOCK

Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>FACEPLATE</th>
<th>BACKSET</th>
<th>HANDELING</th>
<th>FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS1850S</td>
<td>-0S-</td>
<td>-2</td>
<td>-10</td>
<td>-628</td>
</tr>
</tbody>
</table>

| OS Flat       | 1 7/8”   | 15 LH or RHR | 313 Dark Bronze Anodized |
| 1S Radius     | 2 31/32” | 16 RH or LHR | 335 Black Anodized |
| 1SW Radius w/weatherstrip | 3 1-1/8” | 10 Non-Handed* | 628 Clear Anodized |
| 2S Bevel      | 4 1-1/2”  |           |           |

*Any flat or radius faceplate, except Schoolhouse.

RELATED PRODUCTS

When purchasing this product, please consider the following related products, available separately:

<table>
<thead>
<tr>
<th>Accessories</th>
<th>Cylinders</th>
<th>Trim</th>
<th>Special Order Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>4015 Threshold Bolt or 4016 Header Bolt for multi-point locking.</td>
<td>MS1850S Deadlocks are operable by any standard 1-5/32” diameter mortise cylinder with MS® cam.</td>
<td>Deadlock lever trim and keyless entry trim. Exit indicators.</td>
<td>Schoolhouse function available as special order.</td>
</tr>
<tr>
<td>4085 Header Bolt for pairs of doors.</td>
<td>4000, 4001, MS4002 Deadlock Strikes.</td>
<td>Lock mounting accessories and options.</td>
<td></td>
</tr>
</tbody>
</table>

The MS1850S-050 Deadlock utilizes a laminated stainless steel hookbolt, activated by a pivot mechanism to provide maximum security for a sliding narrow stile door.

Function
The MS1850S-050 Deadlock answers the security need of sliding glass doors in commercial, industrial, and institutional buildings. The mechanism is identical to the widely used Maximum Security swinging door lock, except that the massive laminated bolt is provided in a hook shape to resist the parting motion of sliding door and jamb. The over-center MS locking action assures that forced entry attempts to pry the door in any direction, up, down, or sideways will be defeated.

Operation
360° turn of key or thumbturn throws or retracts the counterbalanced bolt. Key can be removed only when bolt is in a positively locked or unlocked position. Lock accepts any standard 1-5/32” diameter mortise cylinder or thumbturn from either or both sides. Cylinder must have MS® dimensioned cam.

Specifications

**CYLINDER BACKSET**
- 7/8”, 31/32”, 1-1/8”, or 1-1/2” only.

**CASE**
- Steel with corrosion-resistant plating, measures 1” x 6” x depth. Depth varies by backset (see table on back of page).

**BOLT**
- 5/8” x 1-3/8” with 13/16” throw. Eight-ply laminated stainless steel. Center ply has alumina-ceramic core to defeat any hacksaw attack, including rod-type “super” hacksaws, while hook shape repels pry bar attempts to “spread” the door from its jamb or lift it off its track.

**FACEPLATE**
- Measures 1” x 6-7/8”.

**STRIKE**
- See back of page for dimensions of strike slot which can be cut in metal jamb. Trim plate, box strike, and armored strike are available separately.

**CYLINDER CAM**
- MS1850S-050 Deadlocks are operable by any standard 1-5/32” diameter mortise cylinder with MS® cam dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.

**OPTIONS**
- Cylinder backset and faceplate finish and shape (radiusied, flat or bevel cross-section to match door nose) must be specified. “SCHOOLHOUSE” version, also available, is modified so that operation from inside is “unlock only”. This lock is handed and must be specified LH or RH. Specify Series SCH1850S-050. Same faceplate and backset options as Series MS1850S-050. Operation from inside, with standard Adams Rite 4066 Trim or with 4550 Deadlock Lever. For wood or hollow metal, see MS1850SN.

**STANDARD PACKAGE**
- Individually boxed with machine screws for mounting. Cylinders and/or thumbturns available separately. Shipping weight: 1-1/2 lbs.
HOW TO ORDER MS1850S-050 SERIES MS® DEADLOCK

Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>FACEPLATE</th>
<th>BACKSET</th>
<th>HANDBLING</th>
<th>FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS185</td>
<td>0S</td>
<td>-2</td>
<td>50</td>
<td>-628</td>
</tr>
<tr>
<td></td>
<td>Flat</td>
<td>7/8&quot;</td>
<td>LH or RHR</td>
<td>313</td>
</tr>
<tr>
<td></td>
<td>1S</td>
<td>31/32&quot;</td>
<td>RH or LHR</td>
<td>335</td>
</tr>
<tr>
<td></td>
<td>1SW</td>
<td>1-1/8&quot;</td>
<td>Non-Handed*</td>
<td>628</td>
</tr>
<tr>
<td></td>
<td>2S</td>
<td>1-1/2&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Any flat or radius faceplate.

RELATED PRODUCTS

When purchasing this product, please consider the following related products, available separately:

Accessories
- 4015 Threshold Bolt or 4016 Header Bolt for multi-point locking.
- 4085 Header Bolt for pairs of doors.
- Deadlock Strikes.
- Lock mounting accessories and options.

Cylinders
- MS1850S-050 Deadlocks are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam.

Trim
- Deadlock lever trim and keyless entry trim.
- Exit indicators.

Special Order Options
- Schoolhouse function available as special order.
**MS1850SN MS® Series Deadlock (ANSI Size)**

The ANSI size MS1850SN Deadlock utilizes a laminated stainless steel bolt, activated by a pivot mechanism to provide maximum security for hollow metal or wood doors.

**Function**

For hollow metal or wood doors prepared for hardware according to the specifications of the American National Standards Institute (ANSI), the MS1850SN Deadlock provides maximum security and ease of installation. Its standard 1-1/2” backset dimension provides adequate clearance for the deep stop on the door jamb of hollow metal entrances.

**Operation**

360° turn of key or thumbturn throws or retracts the counterbalanced bolt. Key can be removed only when bolt is in a positively locked or unlocked position. Lock accepts any standard 1-5/32” diameter mortise cylinder from either or both sides. Cylinder must have MS® dimensioned cam.

**Specifications**

**CYLINDER BACKSET**
- 1-1/2” only.

**CASE**
- Steel with corrosion-resistant plating, measures 1” x 6” x 2-1/4”.

**BOLT**
- 5/8” x 1-3/8” x 2-7/8” with 1-3/8” throw. Eight-ply laminated stainless steel. Center ply has alumina-ceramic core to defeat any hacksaw attack, including rod-type “super” hacksaws.

**STRIKE**
- Available in lipped, ANSI-spec version in steel with chrome finish. See back of page for dimensions of strike slot which can be cut in metal jamb. Other strikes are available separately.

**CYLINDER CAM**
- MS1850SN Deadlocks are operable by any standard 1-5/32” diameter mortise cylinder with MS® cam dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.

**OPTIONS**
- Second and third point locking bolts are available for pairs of steel doors. Shorter “hookbolt” version also available. All use any make standard mortise cylinder and thus can be keyed into systems with other types of doors. “SCHOOLHOUSE” version, also available, is modified so that operation from inside is “unlock only”. This lock is handed and must be specified LH or RH. Specify Series SCH1850SN. Same faceplate and backset options as Series MS1850SN. Operation from inside, with standard Adams Rite 4066 Turn.

**STANDARD PACKAGE**
- Individually boxed with machine screws for mounting. Cylinders and/or thumbturns available separately. Shipping weight: 1-1/2 lbs.
**Dimensions**

- Cylinder shown with flat faceplate.
- Backset measured at centerline of stile nose.

**How Backset is Measured:**
- CYLINDER
- FLAT
- RADIUS
- BEVEL

**Jamb & Stile Preparation**

**FOR 4003-01 ANSI STRIKE**

**Lock & Cylinder Installation**

**HOW TO ORDER MS1850SN DEADLOCK**

Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>FACEPLATE</th>
<th>ANSI SIZE</th>
<th>HANDING</th>
<th>FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS185</td>
<td>0</td>
<td>SN</td>
<td>-410</td>
<td>-628</td>
</tr>
<tr>
<td>0</td>
<td>Flat</td>
<td>415</td>
<td>LH or RHR</td>
<td>313 Dark Bronze Anodized</td>
</tr>
<tr>
<td>1</td>
<td>Radius</td>
<td>416</td>
<td>RH or LHR</td>
<td>335 Black Anodized</td>
</tr>
<tr>
<td>2</td>
<td>Bevel</td>
<td>410</td>
<td>Non-Handed*</td>
<td>628 Clear Anodized</td>
</tr>
</tbody>
</table>

*A flat or radius faceplate, except Schoolhouse.

If ANSI strike required, specify 4003ANSI and finish: 626 or 605 (see ACCESSORIES).

**RELATED PRODUCTS**

When purchasing this product, please consider the following related products, available separately:

- **Accessories**
  - 4015 Threshold Bolt or 4016 Header Bolt for multi-point locking.
  - 4085 Header Bolt for hollow metal pairs of doors. 4085 Header Bolt not recommended for wood applications.
- **Cylinders**
  - MS1850SN Deadlocks are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam.
- **Trim**
  - Deadlock lever trim & keyless entry trim.
- **Special Order Options**
  - Schoolhouse function available as special order.
The ANSI size MS1850SN-050 Deadlock utilizes a laminated stainless steel hookbolt, activated by a pivot mechanism to provide maximum security for wood or hollow metal doors.

**Function**

For hollow metal or wood sliding doors prepared for hardware according to the specifications of the American National Standards Institute (ANSI), this MS deadlock provides maximum security and ease of installation. Its standard 1-1/2" backset dimension provides adequate clearance for the deep jamb "pocket" of many commercial and industrial entrances. Also useful for swinging doors closing against jambs too shallow for the 1-3/8" throw of the MS1850SN swinging door deadlock.

**Operation**

360° turn of key or thumbturn throws or retracts the counterbalanced bolt. Key can be removed only when bolt is in a positively locked or unlocked position. Lock accepts any standard 1-5/32" diameter mortise cylinder or thumbturn from either or both sides. Cylinder must have MS® dimensioned cam.

**Specifications**

**CYLINDER BACKSET**
- 1-1/2" only.

**CASE**
- Steel with corrosion-resistant plating, measures 1" x 6" x 2-1/4".

**BOLT**
- 5/8" x 1-3/8" with 13/16" throw. Eight-ply laminated stainless steel. Center ply has alumina-ceramic core to defeat any hacksaw attack, including rod-type "super" hacksaws, while hook shape repels pry bar attempts to "spread" the door from its jamb or lift it off its track.

**FACEPLATE**
- Measures 1-1/4" x 8".

**STRIKE**
- See back of page for dimensions of strike slot which can be cut in metal jamb. Trim plate, box strike, and armored strike are also available.

**CYLINDER CAM**
- MS1850SN-050 Deadlocks are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.

**OPTIONS**
- Cylinder backset and faceplate finish and shape (radiusied, flat or bevel cross-section to match door nose) must be specified. "SCHOOLHOUSE" version, also available, is modified so that operation from inside is "unlock only". This lock is handed and must be specified LH or RH. Specify Series SCH1850SN-050. Same faceplate and backset options as Series MS1850SN-050. Operation from inside, with standard Adams Rite 4066 Turn.

**STANDARD PACKAGE**
- Individually boxed with machine screws for mounting. Cylinders and/or thumbturns available separately. Shipping weight: 1-1/2 lbs.
### Dimensions

**HOW BACKSET IS MEASURED:**
- 2-7/32" 56.4mm
- 1-15/32" 37.3mm
- 31/32" 24.5mm
- 11/32" 8.7mm
- 7-15/16" 201.6mm
- 7-1/4" 182.2mm
- 13/32" 10.3mm
- 6" 152.4mm
- 51/64" 20.2mm
- 1/4" 6.4mm
- 1 1/16" 26.6mm

**SHOWN WITH FLAT FACEPLATE**

**BACKSET MEASURED AT CENTERLINE OF STILE NOSE**

**HOW TO ORDER MS1850SN-050 MS® DEADLOCK (ANSI SIZE)**

Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>FACEPLATE</th>
<th>ANSI SIZE</th>
<th>HANDELING</th>
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</thead>
<tbody>
<tr>
<td>MS185</td>
<td>0</td>
<td>SN -450</td>
<td>-628</td>
<td></td>
</tr>
</tbody>
</table>

- 0 Flat
- 1 Radius
- 2 Bevel

**PRODUCT NO.**
- 455 LH or RHR
- 456 RH or LHR
- 450 Non-Handed*

**FACEPLATE**
- 313 Dark Bronze Anodized
- 335 Black Anodized
- 628 Clear Anodized

*Any flat or radius faceplate.

### Stile & Wood Door Preparation

**STILE**

- 1" 25.4mm
- 1-1/2" 38.1mm
- 2-3/8" 60.9mm

**BACKSET**

- 1-1/4" 31.8mm

**CYLINDER**

- 2-3/2" 57.9mm
- 2-9/64" 54.4mm
- 8-1/64" 203.6mm
- 59/64" 23.4mm

### Lock & Cylinder Installation

**ARMORED FACEPLATE**

- 1-1/4" X 8" FLAT MS1850SN-450
- RADIUS MS1851SN-450
- LH BEVEL MS1852SN-455
- RH BEVEL MS1852SN-456

**STRIKE CUTOUT**

- 2-11/16" 55.6mm
- 2-3/8" 59.3mm
- 1-15/16" 49.2mm
- 7/8" 22.2mm

**LOCK & STILE**

- 1-17/64" 32.1mm
- 1-17/64" 32.1mm
- 1-17/64" 32.1mm
- 1-17/64" 32.1mm
- 1-17/64" 32.1mm
- 1-17/64" 32.1mm
- 1-17/64" 32.1mm
- 1-17/64" 32.1mm

**CYLINDER**

- 8-1/4" 206.4mm
- 7/16" 15.9mm
- 2-11/16" 55.6mm

### RELATED PRODUCTS

**Accessories**
- 4015 Threshold Bolt or 4016 Header Bolt for multi-point locking.
- 4085 Header Bolt for hollow metal pairs of doors. 4085 Header Bolt not recommended for wood applications.
- Deadlock strikes.

**Cylinders**
- MS1850SN-050 Deadlocks are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam.

**Trim**
- Deadlock lever trim & keyless entry trim.

**Special Order Options**
- Schoolhouse function available as special order.

All measurements are approximate and are provided for informational purposes only. Refer to the product Installation Instructions.

MS1861 Series Bottom Rail Deadbolt

Operation
360° turn of key or thumbturn throws or retracts bolt(s). Key can be removed only when bolts are in a positively locked or unlocked position. Lock accepts any standard 1-5/32” diameter mortise cylinder from either or both sides. Cylinder must have MS® dimensioned cam.

Specifications

CYLINDER BACKSET
• Minimum backset is approximately 2-1/4” for the MS1861-01 with vertical bolt only. The MS1861-02 with vertical and horizontal bolts requires placement of cylinder centerline 5-3/4” from nose of door. Both have cylinder center 1-7/8” above bottom edge of door.

CASE
• Steel with corrosion-resistant plate, measures 1” x 6” x 1-13/16”.

BOLTS
• 3/8” diameter. Stainless steel vertical threshold bolt has 13/16” throw. Hardened steel horizontal bolt has 1-1/8” throw.

STRIKES
• In metal installation, 7/16” drilled holes in threshold are required. For MS1861-02, drilled holes are also required in jamb or opposite door. For wood, metal plate with 7/16” hole must be provided for each bolt.

CYLINDER CAM
• MS1861 Bottom Rail Deadbolts are operable by any standard 1-5/32” diameter mortise cylinder with MS® cam dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.

STANDARD PACKAGE
• Individually boxed with mounting screws. Cylinders and/or thumbturns available separately. Shipping weight: MS1861-01: 1-3/4 lbs., MS1861-02: 2 lbs.

Function
Using the same over-center/pivot locking mechanism as the basic MS® deadbolt, the MS1861 lies horizontally in the bottom rail of ultra-narrow stile doors which have insufficient vertical space for a lock, and tempered glass doors which have no stile at all. The hardened steel cylindrical bolts allow simple drilled strike holes of a relatively small size to minimize the nuisance and danger presented by some threshold strikes in collecting debris or snagging on high-heeled shoes. MS1861-02 locks either single-leaf or pairs of doors. Not recommended for wood doors.

Narrow stile doors require a trim ring to fill the gap remaining between the cylinder shoulder and stile when a standard mortise cylinder is used. If the security of the hardened steel Adams Rite MS4043 Cylinder Guard is not required, this ring may be simply a length of 1.171 I.D. tubing. Its length varies depending on door thickness or cylinder make and number of pins. The specific length required can be quickly determined by the following formula:

\[ \text{TR} = \text{A} + 0.125 - \text{B} \]

\[ \text{TR} = \text{A} + 0.132 - \text{B} \]

For MS® locks:

For 4500 Series Latches:

This cam available from:

Adams Rite
Arrow
Assa
Best
Corbin Ruison
Dorma
Falcon
Kaba-Ilico
Medeco
Sargent
Schlage
Weiser
Yale

Dimensions of Cam to Operate:

4070 Series Deadbolt

2331 Deadbolt

S. 51st Street, Ste 102
Phoenix, Arizona 85044

www.adamsrite.com

© Adams Rite 2014
**Dimensions**

UNIT ILLUSTRATED IS MS1861-02. (BOTH HORIZONTAL & VERTICAL BOLTS INCLUDED.) PART NUMBER FOR VERTICAL BOLT OPERATION ONLY IS MS1861-01. CONVERSION KIT NO. 4014 AVAILABLE TO CONVERT MS1861-01 TO MS1861-02. SEE BELOW:

<table>
<thead>
<tr>
<th>3/4&quot;</th>
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<tbody>
<tr>
<td>1&quot;</td>
<td>25.4mm</td>
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<tr>
<td>63/64&quot;</td>
<td>25mm</td>
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<tr>
<td>1-1/4&quot;</td>
<td>31.8mm</td>
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<tr>
<td>3/8&quot;</td>
<td>9.5mm</td>
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<td>2-1/2&quot;</td>
<td>63.5mm</td>
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<tr>
<td>1-11/16&quot;</td>
<td>42.9mm</td>
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<tr>
<td>3-5/8&quot;</td>
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<tr>
<td>25mm</td>
<td></td>
</tr>
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<td>1-5/64&quot;</td>
<td>47.2mm</td>
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<td>7-1/4&quot;</td>
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<td>101.6mm</td>
</tr>
<tr>
<td>2&quot;</td>
<td>50.8mm</td>
</tr>
</tbody>
</table>

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**4014 Conversion Kit**

To convert MS1861-01 to MS1861-02, 4014 Conversion Kit provides horizontal bolt assembly with guide and attachment fittings.

The 4014 Conversion Kit consists of:

1. Arm & Bolt Assembly
2. Assembly Pin
3. Bolt Guide Bracket
4. Mounting Screws

To assemble, press pin through disc and arm.

---

**Rail Preparation**

FOR MS1861-02

BOTTOM DOOR RAILS WITH WEB WILL REQUIRE MACHINING AS SHOWN. POSITION OF WEB WILL DETERMINE TUBE SPACER REQUIREMENT AND TUBE SPACER LENGTH.

---

**Lock & Cylinder Installation**

BOTTOM RAIL MTG. WEB

TUBE SPACER

TUBE SPACERS MAY BE REQUIRED TO POSITION LOCK MECHANISM.

---

**RELATED PRODUCTS**

When purchasing this product, please consider the following related products, available separately:

**Accessories**

4014 Conversion Kit for multi-point locking applications or it can be ordered with vertical and horizontal bolts (Bolt Operation option 2).

**Cylinders**

MS1861 Bottom Rail Deadbolts are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam.

---

**HOW TO ORDER MS1861 SERIES BOTTOM RAIL DEADBOLT**

Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>BOLT OPERATION</th>
<th>FINISH</th>
<th>PACKAGING</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS1861-01-603-IB</td>
<td>Vertical Bolt Only</td>
<td>Zinc plated steel</td>
<td>Individually Boxed</td>
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<tr>
<td>01</td>
<td>Vertical Bolt Only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02</td>
<td>Vertical and Horizontal Bolts</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If tube spacers are required, specify QUANTITY and LENGTH.
1875 Two-Point Deadlock

The 1875 Two-Point Deadlock provides security for roll-up doors, security screens, or similar doors. Two bolts are operational from either or both sides of the deadlock.

Function
For overhead “garage” doors, roll-up security screens, or similar doors. Provides turn operation of two bolts from either or both sides. Accepts standard mortise cylinders for key control of bolts to secure them in either projected or retracted position.

Operation
90° rotation of turn throws or retracts bolts. 360° turn of key deadlocks mechanism, preventing operation of the turn in either locked or unlocked position.

Specifications

CYLINDER BACKSET
- Bolt arms require inside stile clearance of 1-11/16” on one side of cylinder center, 1” on the other.

CASE
- Steel with corrosion-resistant plate, measures 1” x 6” x 2-5/8”.

BOLT ARMS
- 1-1/32” throw. Threaded for 1/4” – 20 rods. Because of design variations in this type of door, no standard bolt can be offered to fit all makes of doors. Contact the Adams Rite factory concerning bolts, rods, bolt guides, and strikes to fit individual door designs.

4060 TURN
- Zinc alloy escutcheon and handle. Finish is US26D. Steel spindle is also available to accommodate various door thicknesses.

CYLINDER CAM
- 1875 Two-Point Deadlocks are operable by any standard 1-5/32” diameter mortise cylinder with MS® cam dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.

OPTIONS
- 4060 Turn shown is available with choice of spindle lengths. Bolts, connecting rods, bolt guides, and strikes are available by special order. Cylinders also available separately.

STANDARD PACKAGE
- Shipping weight: 1-1/2 lbs.
Dimensions

4060 Turn

Installation

How to Order 1875 Two-Point Deadlock

Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>PACKAGING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1875</td>
<td>-IB</td>
</tr>
</tbody>
</table>

IB Individually Boxed

Related Products

When purchasing this product, please consider the following related products, available separately:

Accessories
- 4060 turn.
- Cylinder guards.

Cylinders
- 1875 Two-Point Deadlocks are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam.

Special Order Options
- Bolts, connecting rods, bolt guides and strikes are by special order only.

All measurements are approximate and are provided for informational purposes only. Refer to the product Installation Instructions.

MS+1890 Series MS®
Deadlock/Deadlatch

The MS+1890 Deadlock/Latch provides a maximum security deadlock for after hour and traffic control convenience during business hours.

Function
Maximum Security deadlock after hours, plus traffic control convenience for management during the business day. Typical installation is a bank or store requiring three modes of door control: 1. Both lock and latch bolts retracted for unrestricted entry and exit during business hours, 2. Handle-operated latch for exit-only traffic just after closing and 3. Maximum Security hookbolt for overnight lockup. NOTE: Handle or paddle operates latchbolt only.

Operation
360° turn of key or thumbturn throws or retracts the hook-shaped deadlock. 120° further turn retracts latch bolt as well. Cylinder may be any make standard 1-5/32" diameter mortise type with MS® dimensioned cam (see CYLINDERS). Handle retracts spring-loaded latchbolt only.

Specifications
CYLINDER BACKSET
- 31/32", 1-1/8", or 1-1/2".

CASE
- Steel with corrosion-resistant plating, measures 1" x 7-3/8" x depth. Depth varies by backset (see table on back of page).

LATCHBOLT
- Zinc alloy with Delrin face for smooth, quiet action, measures 5/8" x 5/8" with 7/16" throw. Handing easily reversible. Bolt can be held fully retracted to allow door to be free swinging (see illustration on back of page).

LOCKBOLT
- 5/8" x 1-3/8" with 13/16" throw. Eight-ply laminated stainless steel. Center ply has alumina-ceramic core to defeat any hacksaw attack, including rod-type “super” hacksaws, while hook shape repels pry bar attempts to “spread” the door from its jamb or lift it off its track.

ARMORED STRIKE
- Satin stainless steel trimplate with steel mounting plate and dust box. Flat strike furnished. Also available for pairs of doors in radius shape, or flat with square corners for ANSI hollow metal jambs. Flat strikes also available with longer lip. MS+1890 Deadlock/Latch cannot be used with electric strikes.

CYLINDER CAM
- MS+1890 Series locks are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.

OPTIONS
- Order handle/paddle for one side only or both sides. Handles/paddles on both sides solve, with minimum traffic impediment, the problem of doors that stand ajar due to wind or air-conditioning pressures.

STANDARD PACKAGE
- Individually boxed with strike and machine screws for mounting. Cylinders available separately. Shipping weight: 2 lbs.
MS+1890 SERIES MS® DEADLOCK/DEADLATCH

Dimensions

HOW TO ORDER MS+1890 SERIES MS® DEADLOCK/DEADLATCH
Specify quantity and the following information. Order related products separately.

PRODUCT NO. FACEPLATE BACKSET STRIKE SHAPE/LIP LENGTH HANDING FINISH

MS+189 1 -3 02 6 -628
0 Flat 2 31/32" 01 Flat/Standard Jamb 5 LH or RHR 313 Dark Bronze Anodized
1 Radius 3 1-1/8" 02 Radius/Standard Stile 6 RH or LHR 335 Black Anodized
1W Radius with weatherstrip 4 1-1/2" 17 Flat/Center Hung 4" Jamb 628 Clear Anodized
2 Bevel 21 Flat/Center Hung 4-1/2" Jamb

For door thickness other than 1-3/4", contact factory.

RELATED PRODUCTS When purchasing this product, please consider the following related products, available separately:

Accessories
Trim strikes, including 4505 armored strike.

Cylinders
MS+1890 Deadlock/Latch is operable by any standard 1-5/32" diameter mortise cylinder with MS® cam.

Trim
4568, 4569 Lever trim and 4591 paddles. Electrified trim/operators are not available for the MS+1890.
MS1950 Series Deadlock

The stainless steel MS1950 Deadlock utilizes a laminated stainless steel bolt, activated by a pivot mechanism to provide maximum security for a single leaf narrow stile door.

Function
A huge bolt of laminated stainless steel, nearly three inches long, activated by an uncomplicated pivot mechanism, has made this basic MS® Deadlock the standard of the narrow stile door industry. The length of this bolt provides maximum security for a single leaf door, even a very tall and flexible one or an installation where the gap between the door and jamb is greater than it should be.

Operation
360° turn of key or thumbturn throws or retracts the counterbalanced bolt. Key can be removed only when bolt is in a positively locked or unlocked position. Lock accepts any standard 1-5/32" diameter mortise cylinder or thumbturn from either or both sides. Cylinder must have MS® dimensioned cam.

Specifications

CYLINDER BACKSET
• 31/32", 1-1/8", or 1-1/2" only.

CASE
• Fully stainless steel case and internal components, measures 1" x 6" x depth. Depth varies by backset (see table on back of page).

BOLT
• 5/8" x 1-3/8" x 2-7/8" with 1-3/8" throw. Eight-ply laminated stainless steel. Center ply has alumina-ceramic core to defeat any hacksaw attack, including rod-type “super” hacksaws.

FACEPLATE
• Measures 1" x 6-7/8".

STRIKE
• See back page for dimensions of strike slot which can be cut in metal jamb. Trim plate, box strike, and armored strike are available separately.

CYLINDER CAM
• MS1950 Deadlocks are operable by any standard 1-5/32“ diameter mortise cylinder with MS® cam dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.

Options
• For jams too narrow to accept the long bolt, the MS1950-050 offers a shorter bolt with hook shape to provide equal security against door-prying attempts. Second and third point locking bolts are available for pairs of doors. All use any make mortise cylinder and thus can be keyed into systems with other types of doors. "SCHOOLHOUSE" version, also available, is modified so that operation from inside is "unlock only". This lock is handed and must be specified LH or RH. Specify Series SCH1950. Same faceplate and backset options as Series MS1950. Operation from inside, with standard Adams Rite 4066 Thumbturn or with 4550 Deadlock Lever.

Standard Package
• Individually boxed with machine screws for mounting. Cylinders and/or thumbturns available separately. Shipping weight: 1-1/2 lbs.
HOW TO ORDER MS1950 SERIES DEADLOCK

Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>FACEPLATE</th>
<th>BACKSET</th>
<th>HANDING</th>
<th>FINISH</th>
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</thead>
<tbody>
<tr>
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<td>-2</td>
<td>10</td>
<td>-628</td>
</tr>
<tr>
<td></td>
<td>Flat</td>
<td>31/32&quot;</td>
<td>LH or RHR</td>
<td>Dark Bronze Anodized</td>
</tr>
<tr>
<td></td>
<td>Radius</td>
<td>1-1/8&quot;</td>
<td>RH or LHR</td>
<td>Black Anodized</td>
</tr>
<tr>
<td></td>
<td>Radius with weatherstrip</td>
<td>1-1/2&quot;</td>
<td>Non-Handed*</td>
<td>Clear Anodized</td>
</tr>
<tr>
<td></td>
<td>Bevel</td>
<td>1-3/8&quot;</td>
<td>Non-Handed*</td>
<td>Clear Anodized</td>
</tr>
</tbody>
</table>

*Any flat or radius faceplate.

RELATED PRODUCTS

When purchasing this product, please consider the following related products, available separately:

Accessories
4015 Threshold Bolt or 4016 Header Bolt for multi-point locking.
4085 Header Bolt for pairs of doors.
4000, 4001, MS4002 Deadlock Strikes.
Lock mounting accessories and options.

Cylinders
MS1950 Deadlocks are operable by any standard 1-5/32” diameter mortise cylinder with MS® cam.

Trim
Deadlock lever trim and keyless entry trim.
Exit indicators.

Special Order Options
Schoolhouse function available as special order.

MS1950-050 Series Deadlock

The stainless steel MS1950-050 Deadlock utilizes a laminated stainless steel hookbolt, activated by a pivot mechanism to provide maximum security for a single leaf narrow stile door.

Function
The MS1950-050 Deadlock answers the security need of sliding doors in commercial, industrial, and institutional buildings. The mechanism is identical to the widely used Maximum Security swinging door lock, except that the massive laminated bolt is provided in a hook shape to resist the parting motion of sliding door and jamb. The over-center MS locking action assures that forced entry attempts to pry the door in any direction, up, down, or sideways, will be defeated.

Operation
360° turn of key or thumbturn throws or retracts the counterbalanced bolt. Key can be removed only when bolt is in a positively locked or unlocked position. Lock accepts any standard 1-5/32” diameter mortise cylinder or thumbturn from either or both sides. Cylinder must have MS® dimensioned cam.

Specifications

**Cylinder Backset**
- 31/32”, 1-1/8”, or 1-1/2” only.

**Case**
- Fully stainless steel case and internal components, measures 1” x 6” x depth. Depth varies by backset (see table on back of page).

**Bolt**
- 5/8” x 1-3/8” with 13/16” throw. Eight-ply laminated stainless steel. Center ply has alumina-ceramic core to defeat any hacksaw attack, including rod-type “super” hacksaws, while hook shape repels pry bar attempts to “spread” the door from its jamb or lift it off its track.

**Faceplate**
- Measures 1” x 6-7/8”.

**Strike**
- See back page for dimensions of strike slot which can be cut in metal jamb. Trim plate, box strike, and armored strike are available separately.

**Cylinder Cam**
- MS1950-050 Deadlocks are operable by any standard 1-5/32” diameter mortise cylinder with MS® cam dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.

**Options**
- Cylinder backset and faceplate finish and shape (radiused, flat or bevel cross-section to match door nose) must be specified. “SCHOOLHOUSE” version, also available, is modified so that operation from inside is “unlock only”. This lock is handed and must be specified LH or RH. Specify Series SCH1950-050. Same faceplate and backset options as Series MS1950-050. Operation from inside, with standard Adams Rite 4066 Turn or with 4550 Deadlock Lever. For wood or hollow metal, see MS1850SN.

**Standard Package**
- Individually boxed with machine screws for mounting. Cylinders and/or thumbturns available separately. Shipping weight: 1-1/2 lbs.
**Dimensions**

How to Order MS1950-050 Series Deadlock

Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>FACEPLATE</th>
<th>BACKSET</th>
<th>HANDING</th>
<th>FINISH</th>
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<td>0</td>
<td>-2</td>
<td>10</td>
<td>-628</td>
</tr>
<tr>
<td></td>
<td>0 Flat</td>
<td>31/32&quot;</td>
<td>15 LH or RHR</td>
<td>313  Dark Bronze Anodized</td>
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<tr>
<td></td>
<td>1 Radius</td>
<td>1 1/8&quot;</td>
<td>16 RH or LHR</td>
<td>335  Black Anodized</td>
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<tr>
<td></td>
<td>1W Radius with weatherstrip</td>
<td>1 1/2&quot;</td>
<td>10 Non-Handed*</td>
<td>628  Clear Anodized</td>
</tr>
<tr>
<td></td>
<td>2 Bevel</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

*Any flat or radius faceplate.

**Related Products**

When purchasing this product, please consider the following related products, available separately:

**Accessories**
- 4015 Threshold Bolt or 4016 Header Bolt for multi-point locking.
- 4085 Header Bolt for pairs of doors.
- 4000, 4001, MS4002 Deadlock Strikes.

**Cylinders**
- MS1950-050 Deadlocks are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam.

**Trim**
- Deadlock lever trim and keyless entry trim.
- Exit indicators.

**Special Order Options**
- Schoolhouse function available as special order.

All measurements are approximate and are provided for informational purposes only. Refer to the product Installation Instructions.

Dual Force® 2190 Interconnected Deadbolt/Deadlatch

The Dual Force 2190 Interconnected Deadbolt/Deadlatch provides access control and security for aluminum stile doors. Latch and deadbolt capabilities are combined for fast, easy, and panic-proof exiting. Intended for out-swinging doors.

Function
The Dual Force 2190 combines the access control capabilities of a latch with the security of a deadbolt. The key retracts and extends the deadbolt (and deadlatch) from either side. The exterior lever retracts the latch only, while the inside lever retracts the deadbolt and latch simultaneously for fast, easy, panic-proof exiting.

Operation
Key or thumbturn retracts or extends deadbolt or deadlatch. Inside lever retracts both when configured with interconnect feature. Outside lever retracts latch only. Latch holdback feature activated or deactivated by turning key to retract latch and sliding holdback button on faceplate down to hold and up to release.

Specifications
INTER-CONNECTION
• Field-selectable inter-connect feature allows interior trim to retract deadbolt and deadlatch. Consult local building officials for guidance in code compliance. Retrofit to existing MS1850S Deadbolt or 4500 and 4900 Deadlatch of the same backset. 1-3/4” minimum door thickness required.

CYLINDER BASKET
• 1-1/8” or 1-1/2” only.

LATCHBOLT/DEADBOLT
• Latchbolt: 5/8” throw of solid brass. Easily reversible using only a screwdriver. Deadbolt: 1” throw of stainless steel.

AUXILIARY DEADLATCH PIN
• Stainless steel. Deadbolts latchnut to prevent “locking” or case-knife entry.

FACEPLATES
• Measures 1” x 6-7/8”. Include Facelift faceplate system that adapts to flat, radius, or beveled door edge. Radius with weatherseal faceplate available separately.

How to Order
DUAL FORCE® 2190 INTERCONNECTED DEADBOLT/DEADLATCH
Specify quantity and the following information. Order related products separately.

STRIKES
• Standard strike furnished is the 2101-01 for flat jamb where door closes flush or nearly flush. The 2101 covers MS® Deadlock strike preparation with modification, and the 4901 Deadlatch strike directly. Also available in radius version for opposite stile pairs of doors and with extended lip strikes for special jamb conditions.

CYLINDER CAM
• The Dual Force 2190 is operable by any standard 1-5/32” diameter mortise cylinder with MS® cam dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.

Options
• Specify trim option, lever style, finish, and strike. Also adapts to paddle operator 4591. See 2290 for wood or steel door version for side and rail type door construction. Note that the low profile trim (trim option 3) is recommended for in-swing door applications. Please refer to 3080 (TRIM) for full offering of designer handle sets.

Electrified Trim Options
• Order 2190 Electrification Kit EK-2190 for adding to the clutched exterior lever. Dual voltage 12/24 VDC rated for continuous duty operation. Energizing the lever allows exterior lever to be turned to retract latch only. The electrified option is not available for low profile trim (trim option 3).

Standard Package
• Individually boxed with trim as specified, strike and machine screws for mounting. Cylinders available separately. Shipping weight: 2 lbs.
Dimensions

Stile Preparation

Jamb Preparation

Latch/Lock, Cylinder & Level Installation


All measurements are approximate and are provided for informational purposes only. Refer to the product installation instructions.

Dimensions Stile Preparation Jamb Preparation

LATCH/Lock, CYLINDER & LEVEL INSTALLATION

2101 STRIKE (covers and previous cutout for MS® Deadbolt) - Retrofits 4901 and 4501 strike preparations.

* THE 2190-01, -02, AND -03 LEVER HANDLES ARE DESIGNED TO RETURN WITHIN 1/2” OF THE DOOR FACE. HANDLES IN THE DESIGNER SERIES DO NOT HAVE THIS SAME FEATURE. PLEASE VERIFY WITH LOCAL CODE REQUIREMENTS TO ENSURE COMPLIANCE.

** HANDED
Dual Force® 2290 Interconnected Deadbolt/Deadlatch

The Dual Force 2290 Interconnected Deadbolt/Deadlatch provides access control and security for wood or hollow metal doors. Latch and deadbolt capabilities are combined for fast, easy, and panic-proof exiting.

Function
The Dual Force 2290 combines the access control capabilities of a latch with the security of a deadbolt. The key retracts and extends the deadbolt (and deadlatch) from either side. The exterior lever retracts the latch only while the inside lever retracts the deadbolt and latch simultaneously for fast, easy, panic-proof exiting. Intended for out-swinging doors.

Operation
Key or thumb turn retracts or extends deadbolt or deadlatch. Inside lever retracts both when configured with interconnect feature. Outside lever retracts latch only. Latch holdback feature activated or deactivated by turning key to retract latch and sliding holdback button on facia plate down to hold and up to release.

Specifications

INTER-CONNECTION
- Field selectable interconnection feature allows interior trim to retract deadbolt and deadlatch. Consult the local building official for guidance in code compliance. 1-3/4” minimum door thickness required.

CYLINDER BASKET
- 1-5/8” or 1-1/2” only.

LATCHBOLT/DEADBOLT

AUXILIARY DEADLATCH PIN
- Stainless steel. Deadlocks latchbolt to prevent “locking” or case-knife entry.

FACEPLATES
- Measures 1-1/4” x 8”. Includes FaceStyle facia plate system that adapts to flat or beveled door edge.

STRIKES
- Standard strike furnished is the 2206 (ASA) strike for flat or case-knife entry.


Dimensions

- Standard Flat
- Standard Round
- Standard Square

Cylinders

- Cylinder CAM
  - The Dual Force 2290 is operable by any standard 1-5/32” diameter mortise cylinder with MS® cam dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.

- Options
  - Specify trim option, lever style, finish, and strike. Also adapts to paddle operator 4991. See 2190 for aluminum door version for narrow side door construction. Thick Door Kit 2190-TDK-XX available separately. Specify door thickness. Request to Exit R90-4601 switch available for small format levers. Note that the low profile trim (trim option 3) is recommended for in-swing door applications.

Electrification

- Order 2190 Electrification Kit EK-2190 for adding to the clutched exterior lever. Dual voltage 12/24 VDC rated for continuous duty operation. Energizing the lever allows exterior lever to be turned to retract latch only. The electrified option is not available for low profile trim (trim option 3).

Standard Package

- Electrification Accessories Cylinders
- Electrification Kit (EK-2190) or it can be ordered with electrified trim (trim option 2).

SHIPPING WEIGHT: 2 lbs.

HOW TO ORDER DUAL FORCE® 2290 INTERCONNECTED DEADBOLT/DEADLATCH

Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>BACKSET</th>
<th>STRIKE</th>
<th>FACEPLATE FINISH</th>
<th>TRIM</th>
<th>HANDLE DESIGNATION</th>
<th>TRIM AND HANDLE FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>2290</td>
<td>3-3</td>
<td>01</td>
<td>01</td>
<td>-32D</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Trim options 1 and 2 are for out-swing doors only.

RELATED PRODUCTS

Electrification

- 2290 Interconnected Deadbolt/Deadlatch can be electrified in the field using the 2190 Electrification Kit (EK-2190) or it can be ordered with electrified trim (trim option 2).

Accessories

- Extended lip strikes.
- 2290 thick door kits.

Cylinders

- 2290 Interconnected Deadbolt/Deadlatch is operable by any standard 1-5/32” diameter mortise cylinder with MS® cam.
**Dimensions**

**Stile Preparation**

* FOR CLUTCHED EXTERIOR TRIM SET

**How Backset is Measured:**

- Maximum gap door to jamb: 1/8" (3.2mm)

**Latch/Lock, Cylinder & Lever Installation**

- Beveled or flat edge

**Jamb Preparation**

- 2206 STRIKE

- Lock & edge of strike plate

- 5/8" (15.9mm)

**Low Profile Trim**

- Outside inside: 5/8" (15.9mm)

**Low Profile Trim**

- Low profile trim

**Dimensions**

- 1-1/4" (31.8mm)
- 1-1/4" (31.8mm)
- 1-1/2" (38.1mm)
- 1-1/2" (38.1mm)
- 2-1/8" (54mm)

**2290 with 01 Lever**

- Int.
- Ext.

**2290 with 02 Lever**

- Int.
- Ext.

**2290 with 03 Lever**

- Int.
- Ext.

**2290 with MD Lever**

- Int.
- Ext.

**2290 with ME Lever**

- Int.
- Ext.

**2190 with MG Lever**

- Int.
- Ext.

**2290 with MJ Lever**

- Int.
- Ext.

**2290 with MN Lever**

- Int.
- Ext.

**2290 with MV Lever**

- Int.
- Ext.

**2290 with MW Lever**

- Int.
- Ext.

* The 2290-01, -02, and -03 lever handles are designed to return within 1/2" of the door face. Handles in the designer series do not have this same feature. Please verify with local code requirements to ensure compliance.

**Handed**

The 2331 Heavy Duty Deadbolt provides a heavy duty deadbolt lock that expands into the strike for heavy duty wood or hollow metal applications.

Function
A heavy duty deadbolt for heavy duty metal or wood sliding doors, the 2331 Heavy Duty Deadbolt throws a massive brass bolt into its strike, then expands or retracts the bolt. Operates with standard mortise cylinder (standard cam) or with standard mortise cylinder thumbturn. There is no latch action.

Operation
360° turn of key or thumbturn extends and expands or retracts and withdraws the bolt. Key cannot be removed unless bolt is positively locked or totally retracted. Requires special cylinder cam (see details on back of page).

Specifications
BACKSET
• 1-3/4” only.
CASE
• Zinc alloy, measures 7/8” x 3-5/8” x 2-5/8” deep.
BOLT
• Brass with stainless steel dogs, 1/2” x 1-1/2” with 3/4” horizontal throw and 11/32” expansion above and below main bolt.
ARMOR FACEPLATE
• Flat faceplate of brass 1” x 5-3/4”. Available in a variety of finishes.
STRIKE
• 1/8” x 1” x 4-11/16” with 5/8” x 1-5/8” opening. Brass, with four-screw mounting. Trim finish same as faceplate.
SPECIAL CYLINDER CAM
• 2331 Heavy Duty Deadbolts are operable by any standard 1-5/32” diameter mortise cylinder with special cam dimensions as shown. Cylinders with such cams can be readily obtained from most cylinder manufacturers.

OPTIONS
• Specify trim finish: US3 Polished Brass (605), US26 Bright Chrome (625), or US26D Satin Chrome (626).

STANDARD PACKAGE
• Individually boxed with strike and wood screws for mounting lock and strike. Shipping weight: 2 lbs.
Dimensions

Wood Door Preparation

Lock & Cylinder Installation

HOW TO ORDER 2331 HEAVY DUTY DEADBOLT
Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>2331</td>
<td>-626</td>
</tr>
</tbody>
</table>

121 To Match Dark Bronze Anodized 313
605 Bright Brass
625 Bright Chrome
626 Satin Chrome

RELATED PRODUCTS  When purchasing this product, please consider the following related products, available separately:

Cylinders

2331 Heavy Duty Deadbolts are operable by any standard 1-5/32" diameter mortise cylinder with special cam.
4070 Series Short Throw Deadbolt (Projection Style)

The 4070 Short Throw Deadbolt provides security for a conventionally projected bolt in installations where the long-throw MS® Deadlock cannot be used. The smaller 4070 offers the longest practical throw from a narrow stile.

Function
For installation where the long-throw MS® Deadlock cannot be accommodated, the smaller 4070 offers the longest practical throw for a conventionally projected bolt from a narrow stile. Operates with one-half key turn of any standard mortise type cylinder or cylinder type thumbturn. This product is not designed for use in bottom rail.

Operation
180° turn of key or thumbturn projects or retracts the bolt. Accepts any standard 1-5/32” mortise cylinder from either or both sides. Cylinder must have special cam to fit (as shown).

Specifications

CYLINDER BACKSET
- 7/8", 31/32", or 1-1/8" only.

CASE
- Steel with corrosion-resistant plating. 1" x 6" x depth. Depth varies by backset.

BOLT
- 5/8" x 1-1/4" x 5/8" throw.

SPECIAL CYLINDER CAM
- 4070 Short Throw Deadbolts are operable by any standard 1-5/32" diameter mortise cylinder with special cam dimensioned as shown. See CYLINDERS section for cylinder make, thumbturn and trim ring information.

STRIKE
- In metal installations, a slot in door jamb serves as strike. Deluxe trim strike 4170 is also available separately for wood installations.

STANDARD PACKAGE
- Individually boxed with machine screws for mounting. Cylinders and/or thumbturns available separately. Shipping weight: 1/2 lb.
4070 SERIES SHORT THROW DEADBOLT
(PROJECTION STYLE)

Dimensions

HOW TO ORDER 4070 SERIES SHORT THROW DEADBOLT (PROJECTION STYLE)

Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>FACEPLATE</th>
<th>BACKSET</th>
<th>HANDING</th>
<th>FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>407</td>
<td>2</td>
<td>-2</td>
<td>6</td>
<td>-628</td>
</tr>
</tbody>
</table>

0 Flat 1 7/8" 5 LH or RHR 313 Dark Bronze Anodized
1 Radius 2 31/32" 6 RH or LHR 335 Black Anodized
2 Bevel 3 1-1/8" 0 Non-Handed* 628 Clear Anodized

*Any flat or radius faceplate. Specify 4170 Trim Strike if required.

RELATED PRODUCTS
When purchasing this product, please consider the following related products, available separately:

Cylinders
4070 Short Throw Deadbolts are operable by any standard 1-5/32" diameter mortise cylinder with special cam.

Accessories
4170 trim strike for wood installations.
4189, 4190 Flush Locksets (Including Deadlock)

The 4189 and 4190 Flush Locksets for sliding doors combine the time-tested and field-proven Adams Rite MS1847 with a slide button.

Function
Projecting only 1/10" from the door stile on either side, 4189 and 4190 locksets allow doors to slide freely past other sliding units or stationary panels. There are no projecting handles to tear draperies or prevent the door from being “stacked” in a wall packet. 4190 has a flush mounted cylinder outside. Not recommended for wood doors.

Operation
Both locksets operated from inside by a simple up or down movement of a slide button, set flush in the deeply recessed finger pull. The lock mechanism (latching action unavailable) is the time-tested and field-proven Adams Rite MS1847 and features the adjustable, self-protecting bolt. Matching “dummy set” is also available (4195).

Specifications
INSIDE OPERATION
• Vertical slide button projects or retracts deadlock bolt.

OUTSIDE OPERATION (4190 ONLY)
• Key in, five-pin cylinder with Schlage “C” keyway, projects or retracts bolt.

BACKSET
• Variable, minimum 5/8", maximum 1-9/32" (from face to lock to escutcheon and cylinder centerline).

STILE THICKNESS
• May be 1” to 1-3/8”. Available by special order for stiles 1-3/8” thick or greater at extra cost.

STILE DEPTH
• Minimum clear depth: backset plus 9/16”.

ANTI-LIFT LOCK MECHANISM
• Basic MS 1848-09 (radius ends) or MS1848-10 (square ends) is supplied. Stainless steel bolt is self-protecting, adjustable for reach.

ESCUTCHEONS
• Zinc Alloy, Satin Silver epoxy.

4413 INTERIOR PULL
• The 4413 provides a surface-mounted grip-type pull on doors already equipped with 4189 or 4190 flush hardware. Mounting is by two machine screws and requires no alteration to door or flush lockset. Attractive sheer-line design blends perfectly with the trim appearance of the flush escutcheons, yet offers a generous hand grip for convenience. Material is ABS plastic in graphite grey color.

OPTIONS
• Specify 4190 if outside key-cylinder operation required; 4189 if not. Add Dash number -10 for square-ended lock face or -09 for round end. Cylinder-only operation (one side) available: 4198 has standard mounting screws, 4196 has non-removable screws. Dummy set 4195 also available. 4413 Interior Pull available separately.

STANDARD PACKAGE
• 4190, with cylinder, and 4189, without cylinder, are each complete packages. Shipped individually boxed with mounting screws. 4190 includes two keys. Standard 4190 units are keyed different (KD). Contact factory for special keying. Weight: 1-1/4 lbs.
HOW TO ORDER 4189, 4190 FLUSH LOCKSETS (INCLUDING DEADLOCK)

Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>LOCKSET EXTERIOR</th>
<th>LOCK FACE</th>
<th>STILE THICKNESS</th>
<th>FINISH</th>
<th>KEYING OPTIONS</th>
<th>PACKAGING</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>90</td>
<td>-09</td>
<td>-1</td>
<td>-130</td>
<td>-01</td>
<td>-IB</td>
</tr>
<tr>
<td>89</td>
<td>Without Cylinder</td>
<td>00</td>
<td>Without Lock</td>
<td>1</td>
<td>1-9/32&quot;</td>
<td>1-13/16&quot;</td>
</tr>
<tr>
<td>90</td>
<td>With Cylinder</td>
<td>09</td>
<td>Radius</td>
<td>2</td>
<td>1-3/8&quot;</td>
<td>1-7/16&quot;</td>
</tr>
<tr>
<td>95</td>
<td>Dummy</td>
<td>09S</td>
<td>Radius Stainless Steel</td>
<td>3</td>
<td>1-1/16&quot; to 2&quot;</td>
<td>1-11/16&quot;</td>
</tr>
</tbody>
</table>

RELATED PRODUCTS
When purchasing this product, please consider the following related products, available separately:

Accessories
4413 Interior Pull.

Special Order Options
Special keying available by special order only:
1) Keyed alike 2
2) Keyed alike 50
3) Keyed alike 100
The 4430 and 4431 Flush Locksets for sliding doors combine the time-tested and field-proven Adams Rite MS1847 with a slide button.

Function

Similar in function and nearly identical in size to the all-metal 4189 and 4190 Flush Locksets, these economical units feature escutcheons molded of sturdy ABS resin. The black satin finish of the 4430 and 4431 lends elegance to aluminum door stiles. Not recommended for wood doors.

Operation

Both locksets operated from inside by a simple up or down movement of a slide button, set flush in the deeply recessed finger pull. The lock mechanism (latching action unavailable) is the time-tested and field-proven Adams Rite MS1848 and features the adjustable, self-protecting bolt. Matching "dummy set" is also available (4432).

Specifications

**INSIDE OPERATION**
- Vertical slide button projects or retracts deadlock bolt.

**OUTSIDE OPERATION (4431 ONLY)**
- Key in, five-pin cylinder with Schlage "C" keyway, projects or retracts bolt. Other cylinder makes not available.

**BACKSET**
- Variable, minimum 5/8", maximum 1-9/32" (from face to lock to escutcheon and cylinder centerline).

**STILE THICKNESS**
- May be 1" to 1-3/8". Available by special order for stiles 1-3/8" thick or greater at extra cost.

**STILE DEPTH**
- Minimum clear depth: Backset plus 9/16".

**ANTI-LIFT LOCK MECHANISM**
- Basic MS 1848-09 (radius ends) or MS1848-10 (square ends) is supplied. Stainless steel bolt is self-protecting, adjustable for reach.

**ESCUTCHEONS**
- Molded ABS resin plastic. Black Satin finish. Deeply recessed finger pull on both sides. Fits same cutout as metal 4189, 4190 Flush Locksets.

**OPTIONS**
- Specify 4431 if outside key-cylinder operation required; 4430 if not. Add Dash number -10 for square-ended lock face or -09 for round end. Dummy set 4432 available. 4453 Interior Pull available separately.

**STANDARD PACKAGE**
- 4431, with cylinder, and 4430, without cylinder, are each complete packages. Shipped individually boxed with mounting screws. 4431 includes two keys. Standard 4431 units are keyed different (KD). Contact factory for special keying. Weight: 1-1/4 lbs.
**Dimensions**

LOCATION OF CYLINDER ON 4431 LOCKSET ONLY

- **Exterior:** 1-1/4" (31.8mm)
- **Interior:** 1-1/4" (31.8mm)
- **EXTerior:** 8-29/32" (229.2mm)

**Stile Preparation**

- **Drill and CSK for #6 screw (2 PLCS):**
  - 3/32" (2.4mm)
  - 17/32" (13.5mm)
  - 1-5/64" (27.4mm)
  - 1-29/64" (36.9mm)

**Installation**

- **Round Cutout:**
  - 4130-09
  - 4131-09
  - 4130-10
  - 4131-10
- **Square Cutout:**
  - 4130-09
  - 4131-09

**How to Order 4430, 4431 Flush Locksets (Including Deadlock)**

Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>LOCKSET EXTERIOR</th>
<th>LOCK FACE</th>
<th>STILE THICKNESS</th>
<th>KEYING OPTIONS</th>
<th>PACKAGING</th>
</tr>
</thead>
<tbody>
<tr>
<td>44 31 -09</td>
<td>00 Without Lock</td>
<td>00 1&quot; to 1-5/16&quot;</td>
<td>00 Without Cylinder</td>
<td>IB Individually Boxed</td>
<td></td>
</tr>
<tr>
<td>44 31 -09S</td>
<td>09 Radius</td>
<td>05 1-3/8&quot; to 1-5/8&quot;</td>
<td>01 Keyed Different</td>
<td></td>
<td></td>
</tr>
<tr>
<td>44 32 -09S</td>
<td>09S Radius Stainless Steel</td>
<td>08 1-3/4&quot; to 2&quot;</td>
<td>02 Keyed Alike in Pairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 Square</td>
<td></td>
<td></td>
<td>50 Keyed Alike (50)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10S Square Stainless Steel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Related Products**

When purchasing this product, please consider the following related products, available separately:

- **Accessories**
  - 4413 Interior Pull.
- **Special Order Options**
  - Special keying available by special order only:
    1) Keyed alike 2
    2) Keyed alike 50
    3) Keyed alike 100
5017 Wood Door Deadlock/Deadlatch

The 5017 Wood Door Deadlock/Latch provides the strength and deeper backset required to secure sliding wood doors.

Function
For wood framed sliding doors, the 5017 Wood Door Deadlock/Latch provides the same thousand pound strength that the MS1847 Deadlock/Latch provides for metal stiles. A deeper backset clears the recessed jamb used with wood doors. The bolt throw is easily adjusted by means of a screw in the faceplate. Mounting is by through-bolts, which also secure the inside turn and outside cylinder when installed.

Operation
45° rotation of turn or key throws or retracts bolt. Bolt is self-protecting: if door is shut while bolt is extended, it will retract, preventing damage or accidental lock-out.

Specifications
BACKSET
• 1-3/16" (1-1/4" including faceplate).

CASE
• Stainless steel, measures 1/2" x 4" x 1-19/32" deep. Bolt is laminated stainless steel (specify 5015 for zinc plated steel case and faceplate).

FACEPLATE
• Stainless steel, 5/8" x 4-1/2" with radiused ends.

1015 TURN
• Available with 1016 blank plate shown for doors from 5/6" to 2-1/4" thickness. Without blank plate turn available (for use with cylinder pull) on doors from 1-7/16" to 2" thickness. Standard finish 130, Satin Aluminum enamel.

4026 CYLINDER PULL
• Five pin tumbler cylinder in zinc alloy housing. Standard finish 130 Satin Aluminum.

OPTIONS
• Specify 5015 for zinc plated steel case and faceplate. 1015 Turn for inside operation is available alone (for use with 4026 cylinder pull on outside) or with a blank 1016 outside trimplate and binder posts (when cylinder is not required). 4810 Box Strike with wood screws available separately.

STANDARD PACKAGE
• Cylinder pulls and/or thumbturns available separately.

Shipping weight: 1/2 lb.
Dimensions

Stile Preparation
FOR LOCK, TURN & CYLINDER PULL

Jamb Preparation
FOR STRIKE

HOW TO ORDER 5017 WOOD DOOR DEADLOCK/DEADLATCH
Specify quantity and the following information. Order related products separately.

<table>
<thead>
<tr>
<th>PRODUCT NO.</th>
<th>LATCH CONFIGURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>5017</td>
<td>-00</td>
</tr>
<tr>
<td></td>
<td>00 Standard</td>
</tr>
<tr>
<td></td>
<td>02 Self Latching</td>
</tr>
</tbody>
</table>

For installation with cylinder, specify quantity of 4026 cylinder pulls and door thickness.

RELATED PRODUCTS  When purchasing this product, please consider the following related products, available separately:

Accessories
Turn and cylinder pull. 4810 Box Strike.
Options & Accessories for Deadlocks

Adams Rite Deadlocks including the MS® Maximum Security Deadlocks can be ordered with a variety of related products including strike plates, cylinder accessories and trim. Different deadlocks have different installation and cylinder requirements. Please refer to product pages for more information on all available deadlock types, functions, installation requirements and complete How-to-Order guides.

For more detailed information on any of the products listed below please refer to the corresponding section of this catalog.

ACCESSORIES

4000 SERIES MS DEADLOCK STRIKES
4000 surface mounted strike plate, 4001 strike plate with dust box, 4005 threshold strike, 4006 floor strike, 4505 armored strike, or 4003 ANSI strike add aesthetics and finish to strike cutouts in jambs.

4800 SERIES STRIKES
4801 for hollow metal, 4802 for wood, or MS4804 reinforcing strike, the 4800 Series Strikes boast vertical adjustment and include a shim system for horizontal positioning for nearly any sliding door using a mortised MS1847 Deadlock or latch.

HEADER BOLTS
4015 Threshold Bolt is a two-point lock that easily secures a single door entrance. Security for pairs of doors with single key turning is possible with the 4016 Header Bolt. The three-point lock easily secures the entire double door entrance when working in conjunction with an MS Deadlock. 4085 Header Bolt facilitate top-of-door third locking point for pairs of doors when working in conjunction with an MS pivoted bolt deadlock and 4015 Threshold Bolt in the active leaf.

EXIT INDICATOR
The 4089 Exit Indicator provides exit door notification for various Adams Rite deadlocks.

CYLINDERS

CYLINDER PULLS
The 4024, 4025, 4026 Cylinder Pulls are designed to operate Adams Rite MS1847 Deadlocks and 5017 Wood Door Deadlock.

4036 MORTISE CYLINDER
The 4036 Mortise Cylinder is a standard 1” long, 1-5/32” diameter cylinder that provides five-pin security with most Adams Rite locks or latches.

4066 THUMBTURN
The 4066 Thumturn interchanges with standard 1-5/32” diameter mortise cylinder and operates locks or latches without a key.

MS4043 CYLINDER GUARD
The MS4043 Cylinder Guard is a hardened-steel, free-swiveling ring to protect cylinder from vandalism such as prying or twisting.

Dimensions of MS cam to operate Adams Rite deadlocks, excluding 4070 Deadlock and 2331 Deadlock.

Dimensions of cam to operate Adams Rite 4070 Deadlock.

Dimensions of cam to operate Adams Rite 2331 Deadlock.
**TRIM**

**1000 TURNS**
The 1000 Turns with or without escutcheon are designed to operate Adams Rite MS1847 Deadlocks and 5017 Wood Door Deadlock. These turns mount easily to door pull or other trim plate using push-nut mounting. The 1004 Turn has a longer, more ergonomically-friendly turn lever, the 1015 Turn is available for wood door applications with the 5017 Wood Door Deadlock.

**3090 KEYLESS ENTRY**
A battery-operated keyless entry control device, the eForce-150 3090 Keyless Entry provides access control for Adams Rite deadlocks, deadlatches, and exit devices for aluminum stile, steel, and wood door applications.

The eForce 3090P (Prox) and 3090C (iCLASS) Keyless Entries provide maximum security with either HID® Prox or iCLASS contactless card reader.

**4550 DEADLOCK LEVER**
The 4550 MS Deadlock Lever easily unlocks an MS Deadlock with approximately 3 pounds of downward force. The spring-loaded lever relocks with an upward motion. Can be installed in place of existing key cylinder or cylinder type thumbturn on inside of door.

**DEADLATCH PADDLE**
The 4590, 4591 Deadlatch Paddle is an ergonomically-friendly alternative to a knob or lever handle. Operate the MS+1890 Deadlock/Latch or 2190, 2290 Interconnected Deadbolt/Deadlatch with a simple push or pull.