

# Preload

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## and the UltraLine Solution

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**7400 Series Electric Strikes**



**ASSA ABLOY**

ASSA ABLOY, the global leader  
in door opening solutions

# What is Preload?

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**Simply stated, door preload is pressure exerted on a door and in turn transferred to the keeper of the electric strike by the latch.**

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When pressure is applied to some models of electric strikes, the solenoid may not have the ability to mechanically release the keeper because the pressure binds it against the latch.

Even a small amount of this preload can cause problems in the functioning of some electric strikes. Door preload can prevent the smooth unlocking of the electric strike or even disable a strike – preventing a door from being opened.

# Preload and Building Security

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**An electric strike failing to release when energized is not the only problem preload can cause.**

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- If the power to the electric strike is interrupted, either by accidental or deliberate means, strong preload pressure can cause a strike in fail safe mode not to function.
- If a serious preload condition is present when the strike is activated the pressure will move the door slightly into an open position, leaving the door unlocked, and the building vulnerable.
- Some of the underlying problems that cause door preload, such as pressure from air conditioning, are not practically or easily corrected.

# The Solution for Preload

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**UltraLine premium electric strikes from Adams Rite address preload and more**

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The UltraLine 7400 Series Electric Strikes have a feature set that is unmatched in the industry.

With a robust and compact design featuring adjustable stainless steel split-jaws, and over 1,500 lbs. of holding force, UltraLine strikes can release electrically with up to 30 lbs. of door preload.

The 7400 Series operates at 12, 16, and 24 VDC with one solenoid. Using jaw inserts of various sizes, the UltraLine 7400 Series Electric Strikes are adjustable to compensate for door and frame related preload and security problems.

# Premium. Compact. Innovative.

## UltraLine 7400 Series Electric Strikes by Adams Rite



### Features

- Exceeds ANSI/BHMA Grade 1 standards
- Over 1,500 lbs. of holding force
- Opens electrically with up to 30 lbs. of preload
- Compact size – 1-1/16" overall depth
- Single solenoid operates at 12, 16, and 24 VDC
- Field selectable – fail-secure or fail-safe
- Compatible with Adams Rite deadlatches, cylindrical locks, and rim exit device latches
- Retrofits with all previous Adams Rite electric strikes
- Low current draw

### Options & Accessories

- Variety of faceplates and finishes
- Monitoring signal switches
- Lip extension kits
- Modular kits
- Quick and easy ElectroLynx™ connector
- Power supply
- Transformers
- Piezo horn for audible indication



# What Causes Preload?

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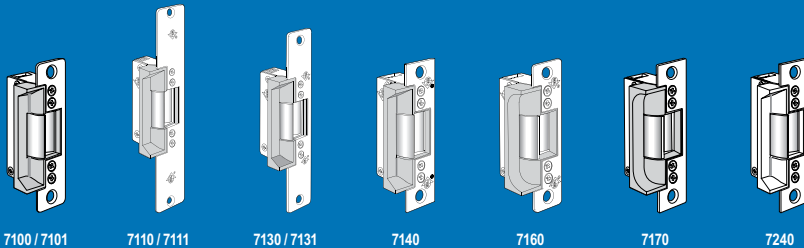
A number of conditions can cause door preload including:

- *Stack pressure caused by HVAC systems*
- *Misaligned strike and lockset*
- *Warped wood doors;  
Damaged or bent metal doors*
- *Thick door seals or heavy weatherstripping*

A strike that does not open or opens only intermittently could be showing signs of a preload problem.

If preload pressure causes a strike or multiple strikes to malfunction, many access and security issues arise.

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<b>Applications</b>	<b>ALUMINUM</b>	<b>HOLLOW METAL</b>	<b>WOOD</b>	<b>Stile</b>
<b>Adams Rite Deadlatch</b>	7100, 7130 7110/7111, 7400, 7430 7410/7411	7140, 7440	7110/7111, 7140, 7410/7411, 7440	7101, 7131, 7401, 7431
<b>Adams Rite Mortise Exit Device</b>	7400	7440	7440	
<b>Cylindrical Lock</b>	7100, 7110/7111, 7400, 7410/7411	7140, 7240, 7440	7110/7111, 7140, 7410/7411, 7440	
<b>Mortise Lock (without deadlock)</b>	7160	7170, 7270	7170	
<b>Rim Exit Device (by others)</b>	74R1, 74R2*	74R1	74R1	

*\*For narrow stile rim exit devices with 1/2" Pullman Latch Throw*

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Adams Rite is known for durable and reliable door hardware... The **7100 Series** is a basic Grade 1 electric strike, with models providing a variety of flexible solutions. The **7200 Series** is for applications requiring a 3 hour fire rating.

The Adams Rite line of premium electric strikes, the **UltraLine 7400 Series**, features an ultra-compact design and an adjustable stainless steel split-jaw with 1500 lbs. of holding force in fail-secure mode, and will release electrically with up to 30 lbs. of door preload.

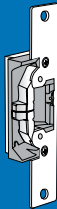
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7270



7400 / 7401



7410 / 7411



7430 / 7431



7440



74R1



74R2

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www.adamsrite.com



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**ASSA ABLOY**

ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience