



# 40H Series Heavy Duty Mortise Locks by BEST

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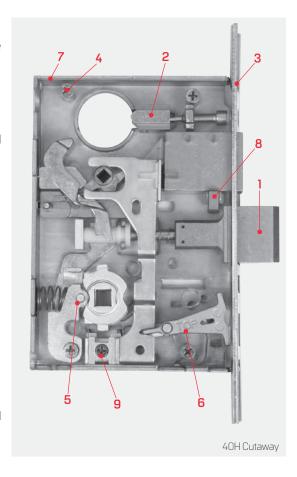
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## **40H Series – Features**

- Solid one-piece stainless steel anti-friction latch provides 50% more surface contact with strike for superior strength and security. Reversible latch rotates 180 degrees for easy handing change without opening case. Precision-engineered curve provides enhanced cycle life with reduced wear to the strike.
- 2. Non-handed cylinder retainer.
- 3. Armored front completely surrounds latch and deadbolt providing increased lateral strength. Staked assembly design allows the armored front to selfalign with the door bevel during installation.
- 4. Enhanced case integrity achieved through four case cover screws (one at each corner), plus interlocking armored front and cover design at the latch.
- 5. Roller bearing hub mechanism provides smooth, wear resistant operation.
- 6. Locking toggle includes clear indication of "locked" and "unlocked" states. 7. 40H case, cover, and armored front manufactured from 0.095" cold rolled steel for strength and durability.
- 8. Fusible link.
- 9. Four position hub toggle design determines whether each hub is always locked, always unlocked, or locked by key for easy handing change without opening case.
- 10. Lever return spring mechanism located in trim for enhanced protection against lever droop, providing a firm, positive return of the lever to the horizontal position.
- 11. Self-aligning trim mechanism for fast, easy, and accurate installation.
- 12. Curved lip strike and strike box assembly provides an aesthetic, non-handed solution to complement field reversible case.
- 13. Solid machined cylinder rings with wavy washer provides resistance to wrenching of cylinder. Cylinder security screw prevents removal of cylinder without first removing interchangeable core.
- 14. Visual indicator options show a padlock icon open for unlocked and padlock icon closed and painted red for locked.
- 15. Non-handed stainless steel auxiliary bolt for ease of changing hand. (not shown)





#### **Specifications**

#### **ADA-Americans With Disabilities Act:**

**45H Series** – The design and operation of the BEST® mortise lock meets the intent of the standard for ANSI A117.1 section 404.2.6.









#### **Builders Hardware Manufacturers Association:**

**45H Series** – ANSI A156.13, Series 1000, Grade 1 Operation and Strength, Grade 2 Security. To meet Grade 1 Security, a drill resistant core (1CD, 1CDP, 1CDF, or 1CDX) must be used with escutcheon trims, and 1EK7K4 high security cylinder must be used with sectional trims.

47H Series – ANSI A156.13, Series 1000, Grade 1 Operational, Strength, and Security.

**Underwriters Laboratories**<sup>®</sup> – The 40H series is listed by Underwriters Laboratories for use on a 3 hour A label doors. These locks also carry the C-UL mark which is officially accepted in all of Canada, indicating compliance with appropriate Canadian standards and codes. The 47H series locks conform to UL437 standard for key locks, referencing door locks. The 1EJ7J4 cylinder used in the 47H series also conforms to UL437 standard for key locks, referencing high security cylinders, and is listed for Canada as well as the United States.

**Florida Building Code (FBC) Listed and Miami-Dade County Code Compliance Office** – See certification listing for all 40H series lock functions that are certified for use in applications requiring a design pressure rating as specified.

Description	Model	Single Door	Double Door	
PSF w/o DeadBolt	45H and 47H	+-60	+-35	
PSF w/ DeadBolt	45H and 47H	+-100	+-50	
PSF w/ DeadBolt	48H and 49H	+-50	+-50	

The 40H series lock has received a notice of acceptance from Miami-Dade County and is considered Miami-Dade County product. "WS" option must be ordered for the lock to include a "Miami-Dade County Product Control Approved" label for inspection purposes.

Auxiliary bolt - Stainless steel, non-handed.

Backset - 23/4"

Case -0.095" cold rolled steel, 57/8" H x 7/8" D x 41/16" W. Steel is zinc dichromate plated for corrosion protection.

Deadbolt - Stainless steel, 1" throw.

Latchbolt – Solid stainless steel, 3/4" throw. Latch is oil-impregnated for anti-friction operation. Reversible without opening case.

Strike – For complete strike package spec's see page 5.

**Door Thickness** – Standard lock configuration designed for doors 13/4" thick. Thick door configuration available for doors up to 5" thick (specify thickness when ordering).

**Faceplate** – Stainless steel, brass or bronze material, 8" H x 1 1/4" W x 1/16" T. Lock face automatically adjusts to proper bevel during installation.

Products protected by one or more of the following patents: 4,873,853 5,590,555 5,794,472

#### Finishes -

- · 605 bright brass, clear coated
- 606 satin brass, clear coated
- · 611 bright bronze, clear coated
- 612 satin bronze, clear coated
- 613\* oxidized satin bronze, oil rubbed
- 618 bright nickel plated, clear coated (brass base material)
- 619 satin nickel plated, clear coated (brass base material)
- \*613 finish is designed to wear over time, providing an "antique" appearance.
- \*690 finish will continue as a dark brown appearance over time.

- 622 flat black coated (brass base material) 625 bright chromium plated (brass base material)
- 626 satin chromium plated (brass base material)
- 629 bright stainless steel
- 630 satin stainless steel
- 690\* dark bronze coated (brass base material)

#### Antimicrobial Finish -

- 626AM satin chrome plated with UltraShield™ antimicrobial protected coating
- 630AM satin stainless steel with UltraShield™ antimicrobial protected coating

The BEST UltraShield finish inhibits the growth of bacteria and other microbes on the surface of the hardware.

NOTE: BEST UltraShieldTM option is recommended for use on any hardware application where product cleanliness is a high priority. i.e.; Hospital/Healthcare, Elderly Care, Education, Transportation, Food-Service, Hospitality.



#### **Specifications**

#4 Knob – Diameter – 21/8"; Projection on door – 27/8" Material machined from solid brass or bronze.

Decorative and Special Order Lever Handles - Stainless steel base material with applied finish.

**Standard Lever Handles** – Brass, bronze, or stainless steel base material for standard lever designs. Lever styles #3, #14, and #15 return to a minimum of 1/2" of door surface. Lever styles #3 and #14 conform to California Titles 19 and 24. Lever styles 12, 16 and 17 do not return. Levers project 2 15/16" from door surface with H, J, R and S trim. Levers project 3 1/64" with M and N trim.

Roses – Wrought brass, bronze, or stainless steel base material.

- H Flat w/ round edge, 2 3/4" diameter.
- R Contoured w/ round edge, 2 3/4" diameter.
- S Flat w/ beveled edge, 3 1/2" diameter.

**Escutcheons** – J – Wrought brass, bronze, or stainless steel base material, 7 1/2" H x 2 9/32" W x 17/32" T. M & N – Forged brass or bronze, 8" H x 2 1/8" W x 37/64" T, through bolt mounted (no exposed screws outside). M – Standard cylinder; N – Concealed cylinder.

Vandal Trim –VT – Vandal trim is available in standard finish for H, J, M, N, R, and S trims in either #14 or #15 levers.

NOTE: Not available in single or dummy trim functions. If compliance to California Building Code Title 19 & 24 is required, the #14 lever design must be specified.

**Visual Indicators** –VIN– Visual indication uses an unlocked padlock or locked padlock image with red background to indicate lock state. VIT–Visual indication uses a thumb-turn with color coded locked and unlocked icons – red indicates door is secure and green indicates door is unsecure.

# **Universal Lock Design Concept**

Strength, Durability...and now Flexibility. Sure, a mortise lock is one of the strongest and longest lasting locks available. But who says it has to be the most complex to order and install? When designing the 40H mortise lock, BEST® decided to focus on things that would make the lock easier to use, while at the same time maintaining the strength, durability, and dependability you would expect in a BEST® mortise lock.







In addition to the ability to quickly change the lock handing, the universal case design of the 40H provides the ability to reconfigure a lock into many different functions easily and quickly, often by rearranging existing parts without disassembling the lock case. The efficiency of the design enables over 12 of the most commonly used lock functions to be included in just 3 case configurations.

The 40H provides the ability to postpone decisions on how the lock will be configured all the way up to the point of installation, making it one of the most flexible and user-friendly mortise locks available. This translates into value for anyone involved in the process, whether they're an architect, specification writer, distributor, or end-user.

# Flexibility in Ordering

BEST offers three ways in which to order the 40H mortise lock. YOU get to choose which method meets your needs.

**Function Specific Lock** - If you know exactly what you need in a mortise lock, and are confident that your needs won't change, then order your 40H locks in the traditional way by specifying the exact function, trim, finish, and handing. BEST<sup>®</sup> will build the locks to work exactly as specified, so they may or may not have the ability to be converted to another function in the future.

**Universal Lock** - If you want to keep your options open, this method of ordering the 40H is for you. BEST® has developed three "universal" functions that can be configured to a variety of common functions, all without opening the lock case. When any of the universal functions are ordered as a complete lock, all the necessary parts (including trim) are provided to configure any of the functions in that group. Universal locks can only be ordered with sectional trim. If escutcheon trim is needed, order a three-part lock.

UNR	ANSI	UNT	ANSI	UNAB	ANSI
A – office	F04	L – privacy	F19	AB – office	F20
AT – office	F04	T – dormitory	F13	TA – dormitory	F12
D – storeroom	F07			TD – dormitory	
N – passage	F01				
NX – exit	F31				
R – classroom	F05				

Four-Part Lock – For the maximum flexibility in ordering a mortise FOUR-PART LOCK lock, BEST® provides a way to order your 40H lock in four parts: Inside Trim, Case Only, Outside Trim and Strike Packages. The kits that make up these four parts have been carefully designed so that when all three are combined you have everything found in a complete 40H lock. This order method is ideal for customers wanting to stock a variety of trim designs with a minimal number of lock cases.



# Standard Mortise Cylinder

### Standard 1E74 Mortise Cylinder

Designed for standard security applications, BEST® offers the 45H/48H mortise locksets, utilizing the 1E74 mortise cylinder and special interchangeable core. Special cylinder variations are available for most applications. BEST cylinders are machined from solid brass or bronze bar stock. Additional security is provided by a set screw that mounts diagonally into the cylinder wall. This set screw prevents unauthorized removal of the cylinder without use of the control key.

## 1E74 Cylinder Specifications

Diameter: 15/32". 1.150-32 (NS-2A) threaded mortise cylinder.

**Lenath**: 11/4"

Material: Brass or bronze.

Finish: Supplied to match mortise lockset trim (see specifications, page 3).

**Cylinder Ring:** Wrench resistant ring with tension spring, machined from all brass or bronze. Proper length automatically provided with lockset. For more ring information see cylinder catalog.

**Cam:** Proper cam provided for cylinder as required by designated function on order. Special cams available; see cylinder catalog section.





