

WARRANTY AND LIMITATION OF LIABILITY

"PORTES ET CADRES METALEC INC.", warrants its products to be free from defects in materials and workmanship under normal conditions of use and maintenance, for a period of one year from the date of shipment. METALEC shall, at its option, repair or replace its product which in METALEC's opinion are found to be defective.

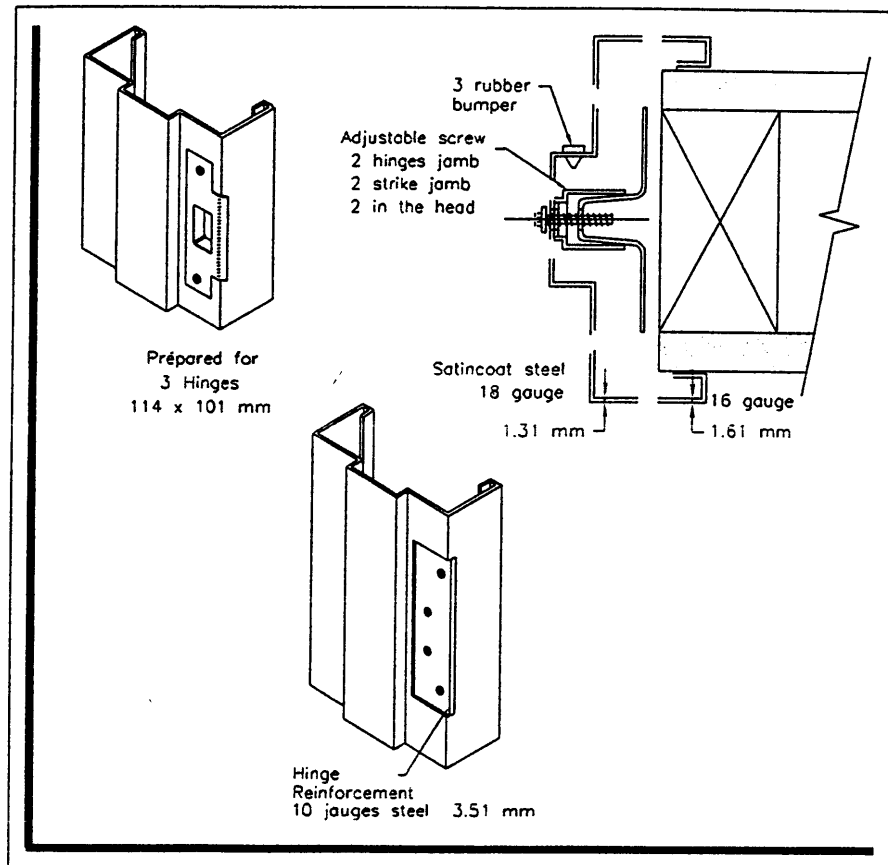
This warranty shall not apply to any products which, in the opinion of METALEC, have been modified, repaired, altered, or damaged in any way during transit or installation.

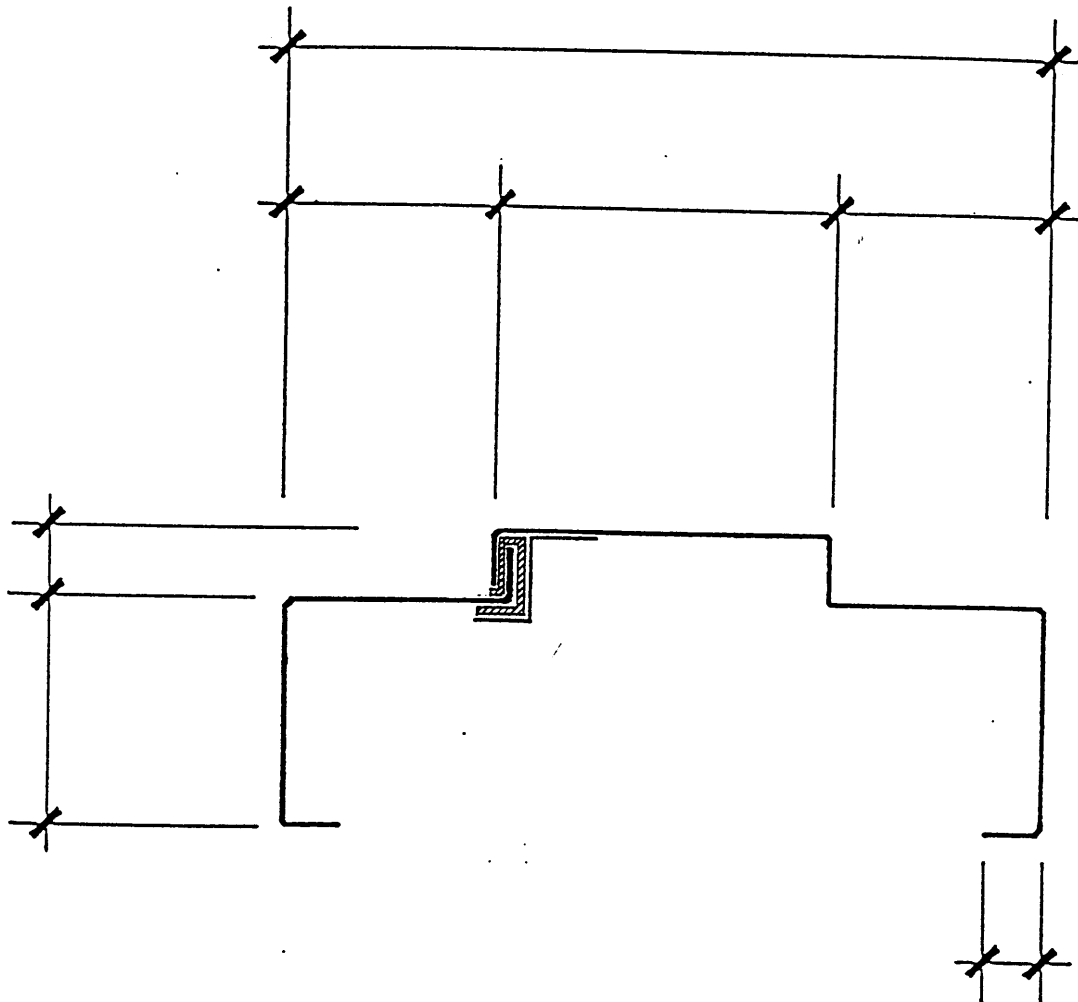
METALEC will not be responsible or liable for any or consequential damages, nor, without limiting the foregoing, for claims for labour, material, loss of profits, personal injuries, repairs, or transportation or other expenses incidental to default under this warranty.

All exterior doors must receive a "Top Cap" or else the warranty is void. No representative, distributor, agent or employee of METALEC has the authority to alter or extend the obligation of this warranty.

Claude Harton
Sales Manager

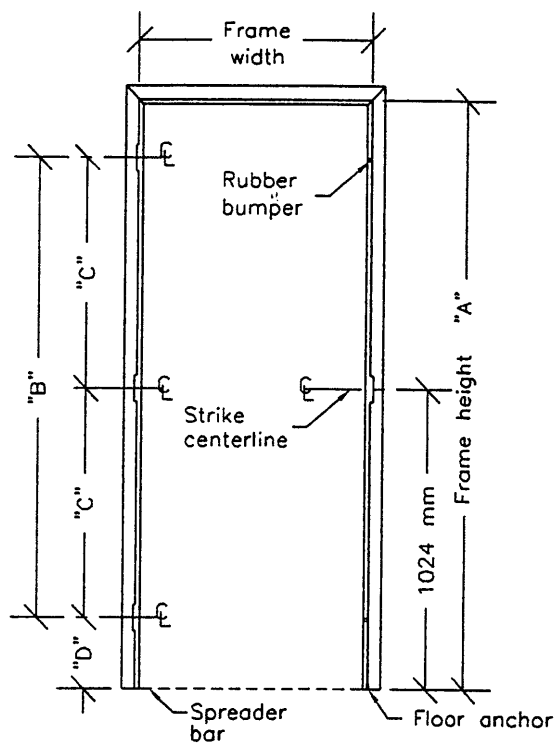
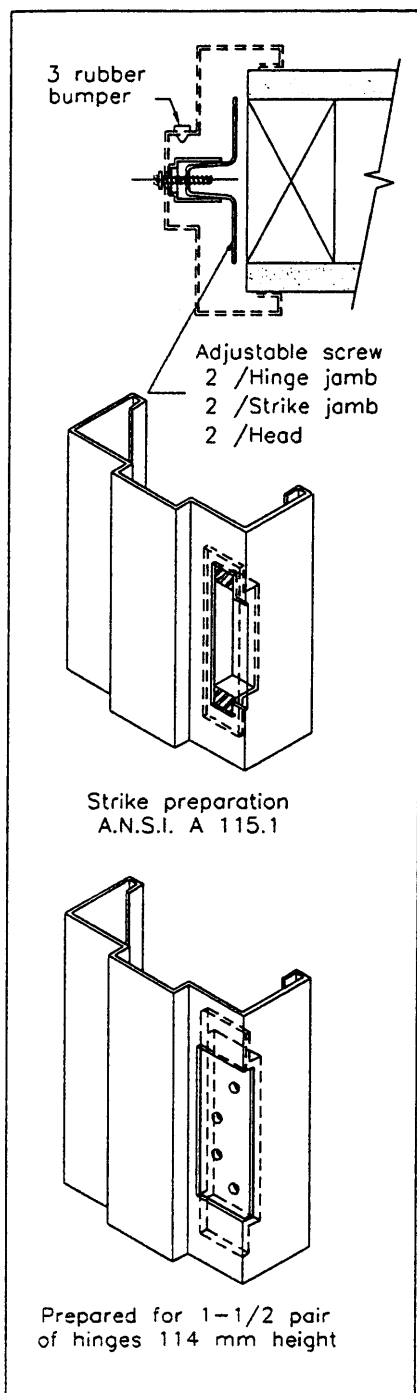
FRAME SPECIFICATIONS





THERMALLY BROKEN FRAME

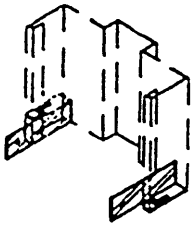
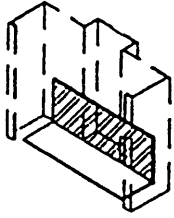
SPECIFICATIONS FOR KNOCKDOWN OR WELDED FRAMES

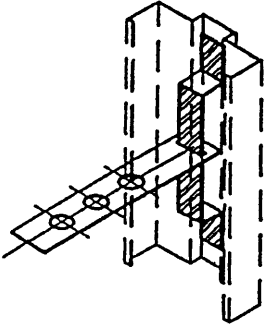
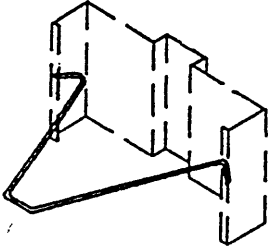
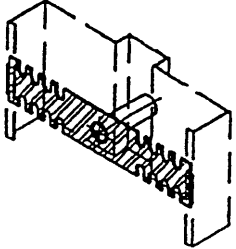


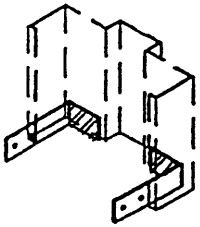
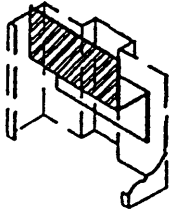
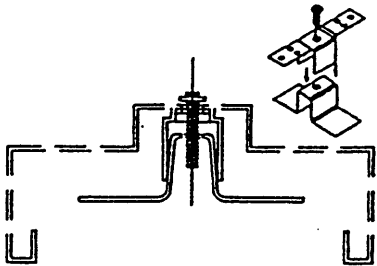
ELEVATION

HEIGHT (mm)	2032	2083	2134
DIMENSION "A"	2032	2083	2134
DIMENSION "B"	1520	1571	1622
DIMENSION "C"	760	785.5	811
DIMENSION "D"	264	264	264

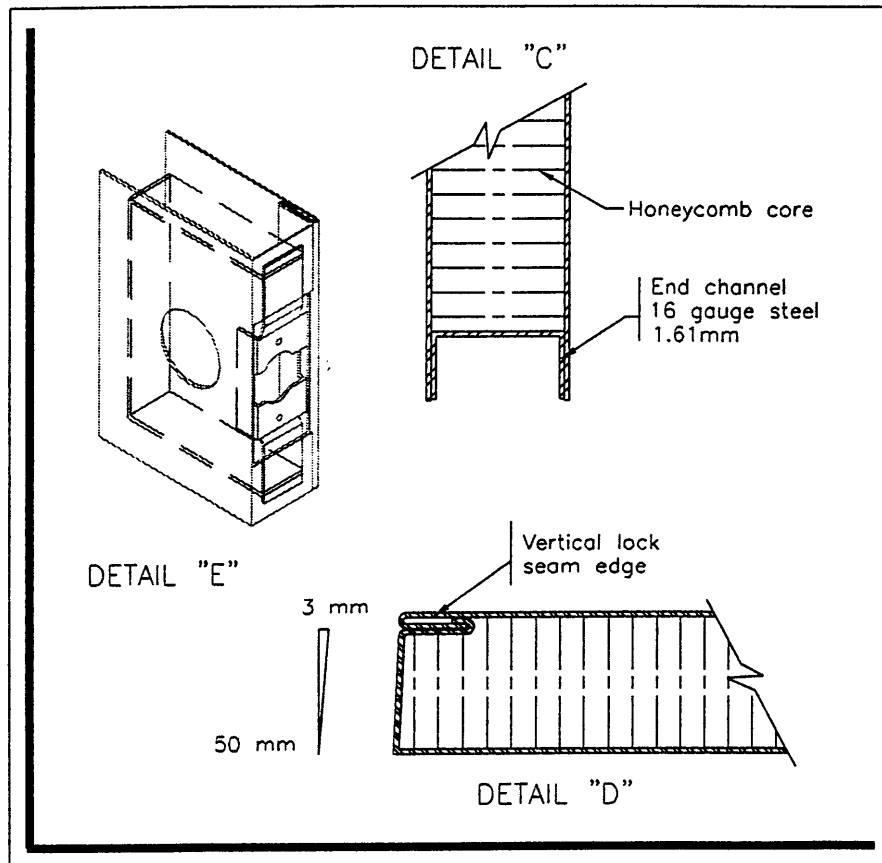
ANCHOR TYPES

			
ATT 2		ATT 3	
Strap anchor (Kwik-fit)		Welded in floor anchor	

					
ATT 4		ATT 5		ATT 6	
Adjustable strap anchor for masonry (ULC 3 hrs)		Adjustable wire anchor for masonry (can be use for ULC-1 1/2 hrs)		Existing masonry anchor	

					
ATT 7		ATT 8		ATT 9	
Strap anchor		Stud anchor		Adjustable tension anchor	

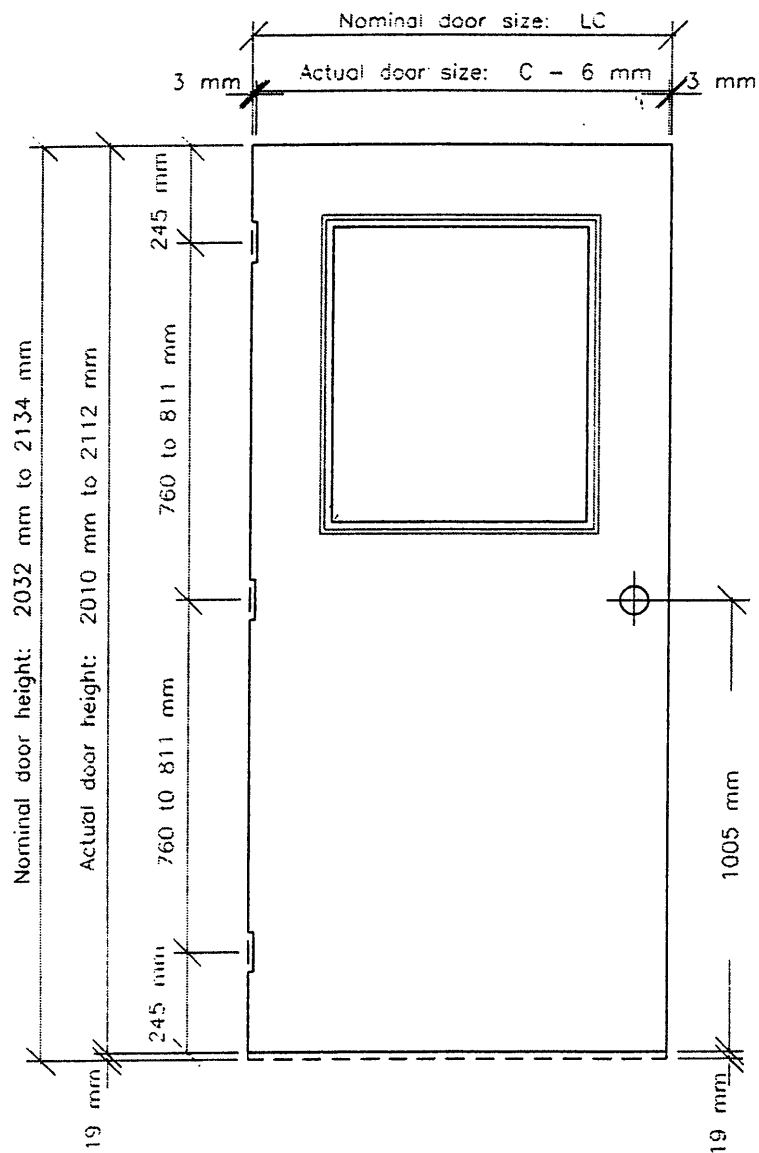
DOOR SPECIFICATIONS



SPECIFICATION FOR STEEL DOOR

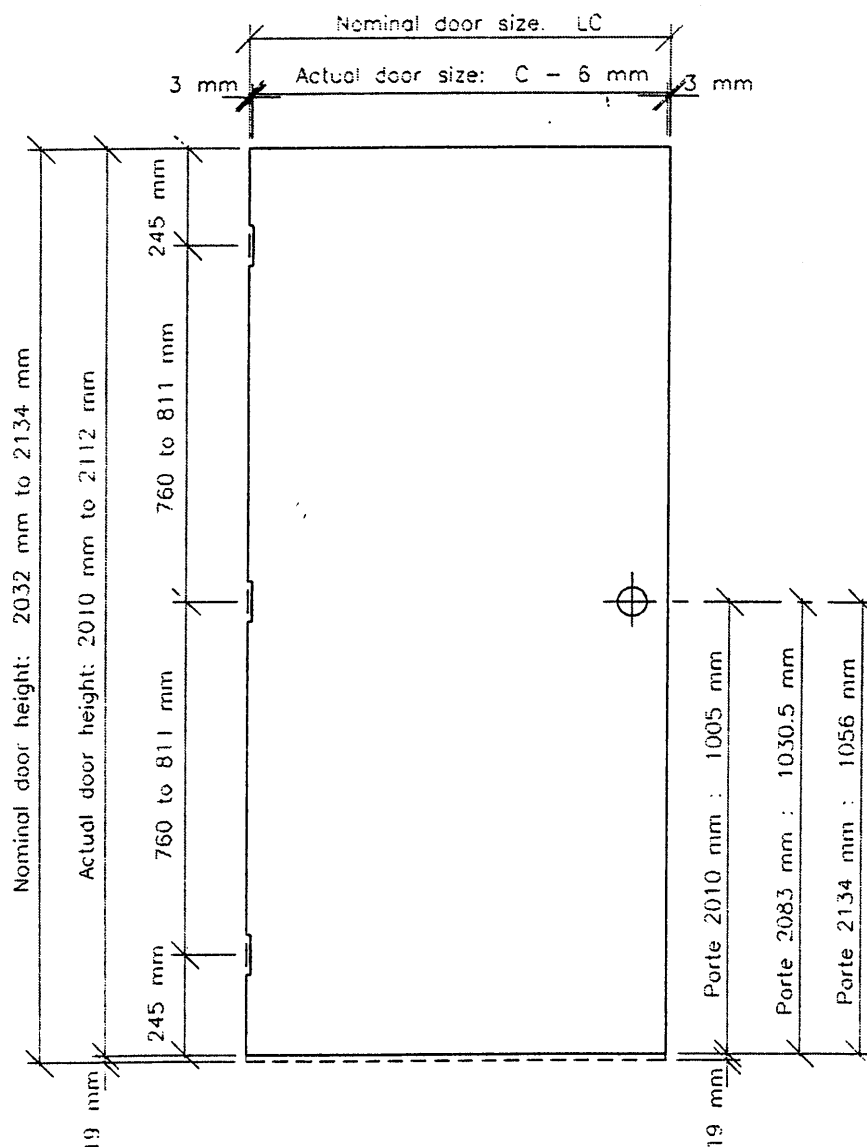
(1 / 8)

STANDARD



SPECIFICATIONS FOR STEEL DOOR TO USE WITH (2 / 8)

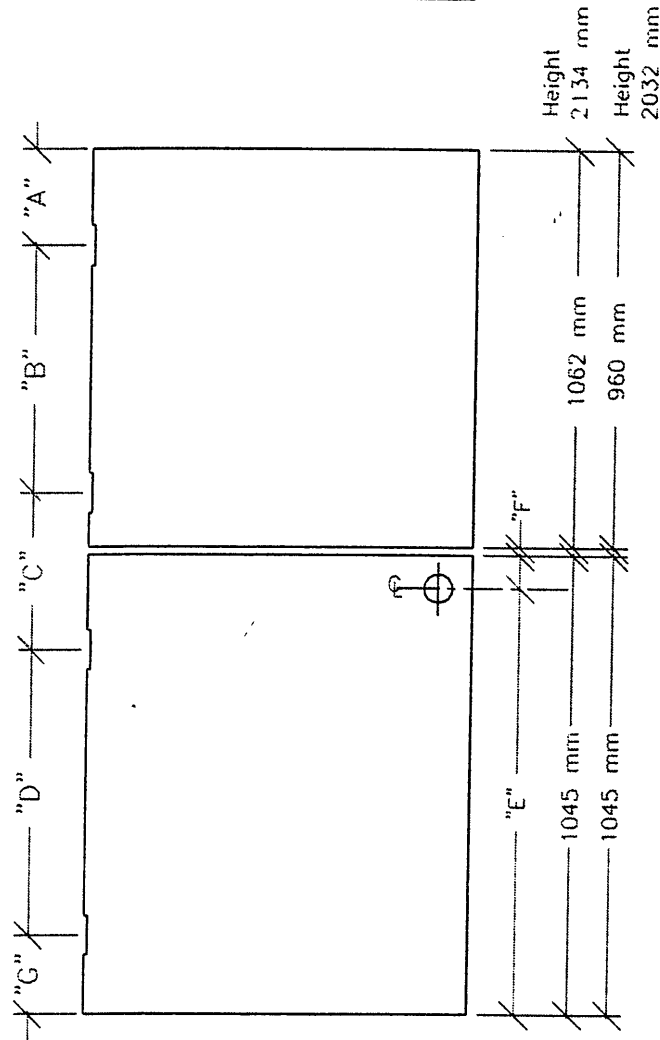
REVERSIBLE DOOR FRAMES (KWA-FT)



SPECIFICATONS FOR STEEL DOOR

(3 / 8)

1100 - 1100

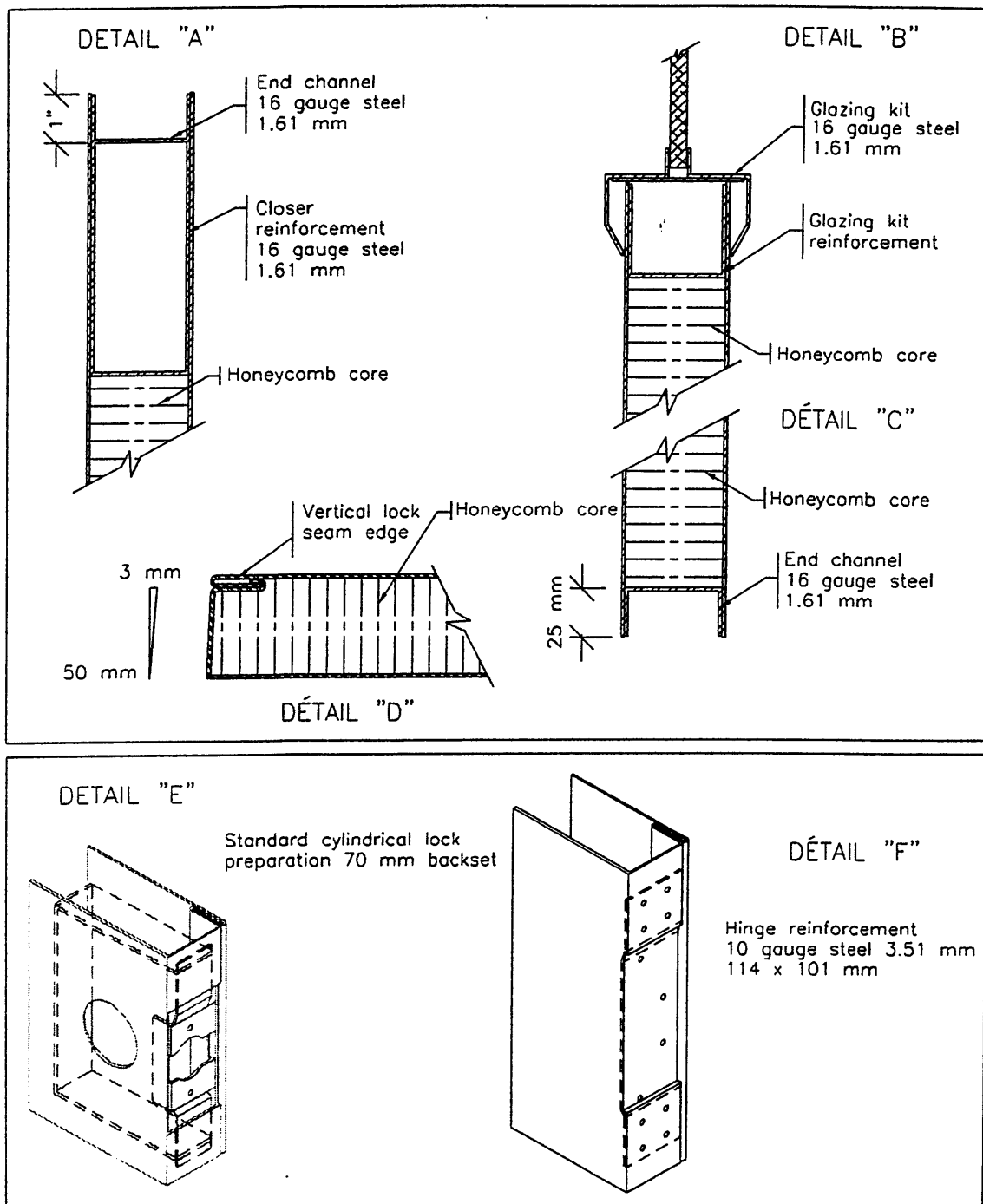


DOOR DIMENSIONS	"A"	"B"	"C"	"D"	"E"	"F"	"G"
2134 mm	245 mm	571 mm	495 mm	556 mm	921 mm	5 mm	245 mm
2083 mm	245 mm	520 mm	495 mm	556 mm	921 mm	5 mm	245 mm
2032 mm	245 mm	469 mm	495 mm	556 mm	921 mm	5 mm	245 mm

SPECIFICATIONS FOR STEEL DOOR

(4 / 8)

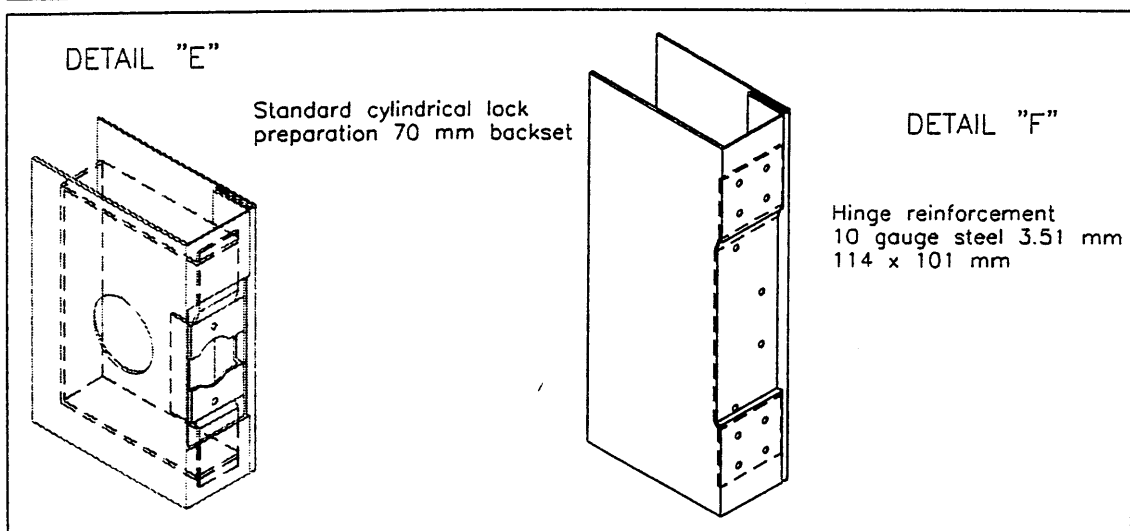
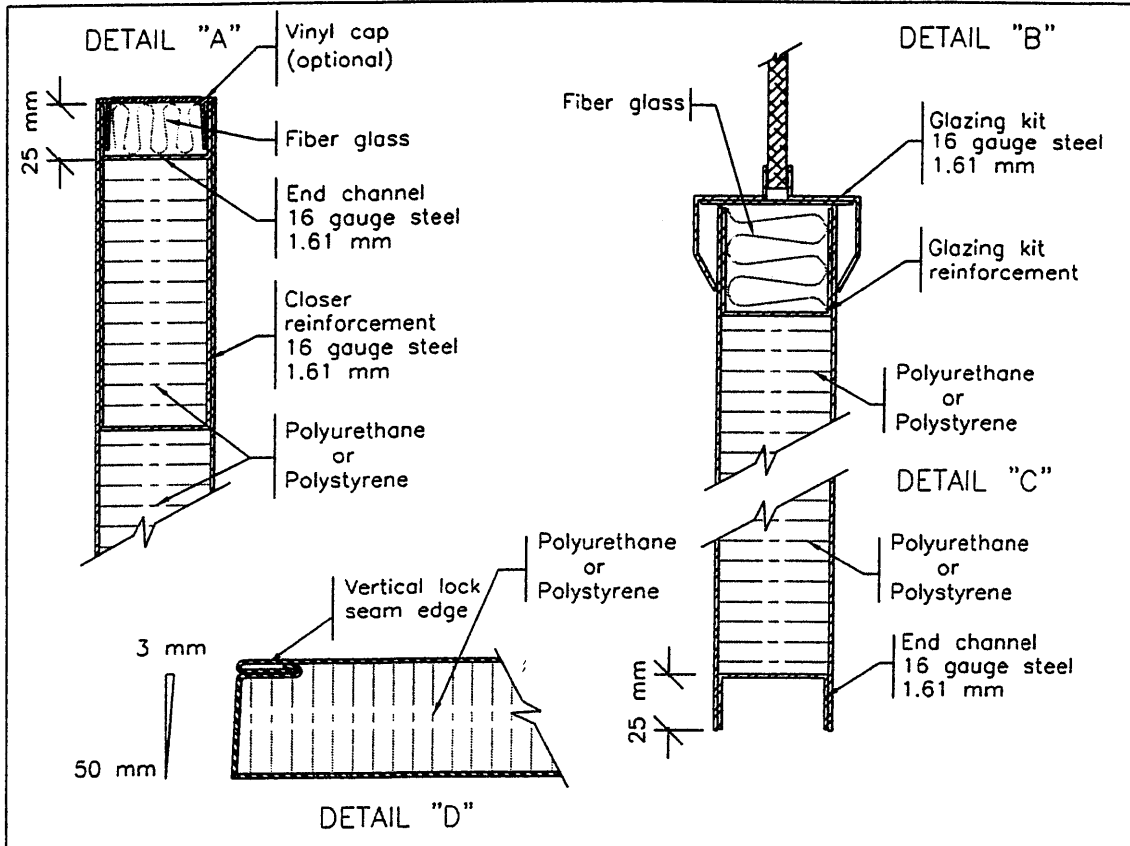
DOOR SPECIFICATION



SPECIFICATIONS FOR STEEL DOOR

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DOOR SPECIFICATION

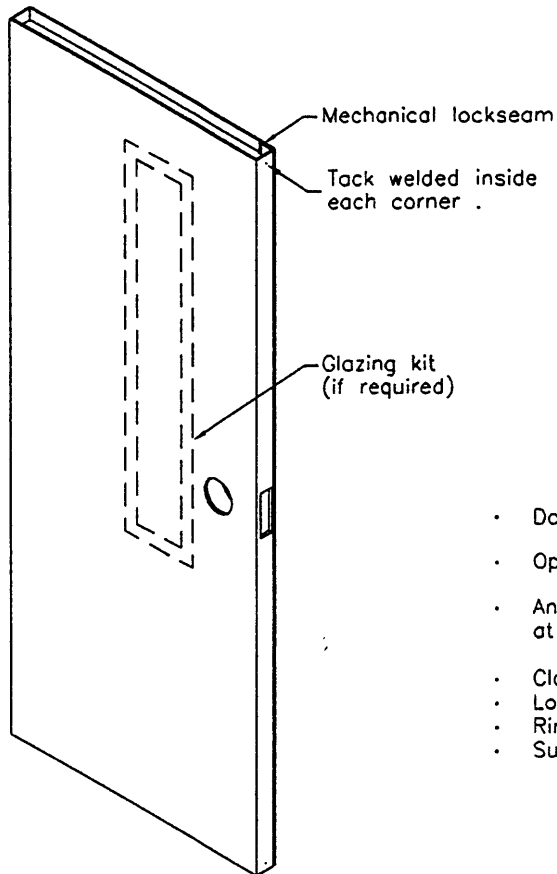


STEEL DOORS

(6 / 8)

MAXIMUM DIMENSIONS

- Maximum width : 1219 mm
- Maximum height : 2134 mm



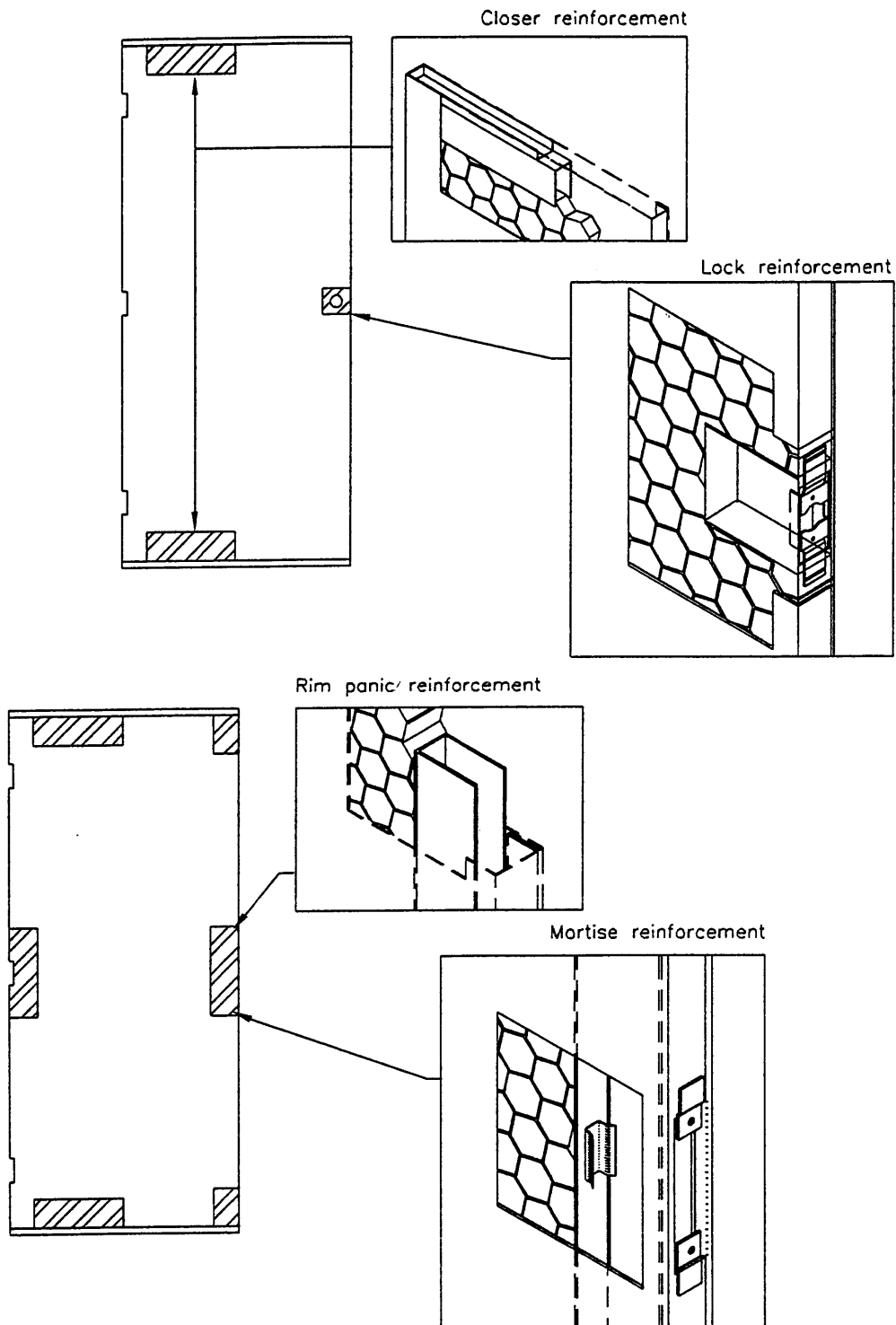
- Doors skins wipe coat galvanized steel
- Optional: Galvanised steel Z275 (G90)
- Any hardware preparation can be done at the factory .
- Closer reinforcement
- Lock reinforcement
- Rim panic reinforcement
- Surface bolt reinforcement

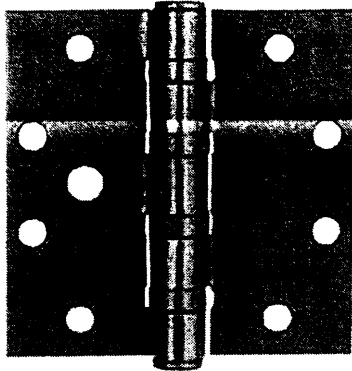
SPÉCIFICATIONS

- Door thickness 45 mm
- Doors are prepared for architectural hardware if specified .
- Door skins are made of wipe coat of galvanized steel (satin coat)
- Door shall be flush with visible edge seams . All tacks welded in grind smooth near from hardware preparation .
- Door core can be honeycomb , polyurethane or polystyrene board.
- Doors can be fire rated , if required .

DOOR SPECIFICATIONS

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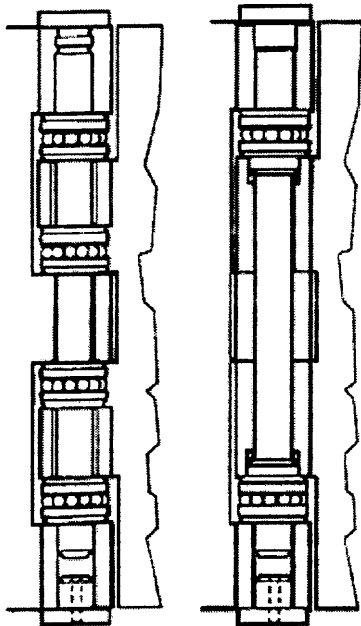
061346 - FBB168 4-1/2"x4" 26D Ball Bearing Hinge**Features and Benefits**

- ANSI A8111
- Steel – polished and plated or phosphated and prime coated for painting
- For heavy doors or doors where high frequency is expected, such as entrance doors to office buildings, stores, public buildings and corridor entrance doors to offices
- All hinges have template screw hole location for use on either wood or hollow metal doors and frames
- Equipped with four permanently lubricated non-detachable ball bearings
- Equipped with easily seated, non-rising pins
- Pins in nonferrous hinges are stainless steel
- Steel hinges are highly polished and buffed, then plated to insure a fine durable finish or phosphated and prime coated for painting
- Heavy weight gauges increase available bearing surface area for maximum friction reduction
- Equipped with sleeve bearing for lateral support
- Available in wide throw, specification on request


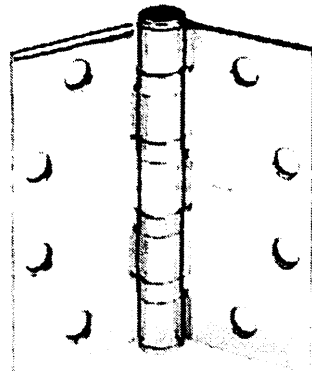
Click to Enlarge

 --> **Hardware Templates**
Product Details

Length	4-1/2",114.3mm
Width	4",101.6mm
Class	FBB168
Finish	26D
Finish Description	Satin Chromium Plated
Type	STOCK



Warranty

044783 - FBB199 4-1/2"x4-1/2" 32D Ball Bearing Hinge Click to Enlarge**Features and Benefits**

- ANSI A2111
- ANSI A5111
- Brass or Bronze – highly polished and finished; Stainless Steel – highly polished; Stainless Steel – satin finish
- For heavy doors or doors where high frequency is expected, such as entrance doors to office buildings, stores, public buildings and corridor entrance doors to offices
- All hinges have template screw hole location for use on either wood or hollow metal doors and frames
- Equipped with four permanently lubricated non-detachable ball bearings
- Equipped with easily seated, non-rising pins
- Pins in nonferrous hinges are stainless steel
- Steel hinges are highly polished and buffed, then plated to insure a fine durable finish or phosphated and prime coated for painting
- Heavy weight gauges increase available bearing surface area for maximum friction reduction
- Equipped with sleeve bearing for lateral support

 --> **Hardware Templates****Product Details**

Length	4-1/2", 114.3mm
Width	4-1/2", 114.3mm
Class	FBB199
Finish	32D
Finish Description	Satin Stainless Steel Metal
Metal Gauge	.180
Machine Screws Per Piece	8 - 12-24x1/2
Wood Screws Per Piece	8 - 12x1-1/4
Type	STOCK

Warranty

VON DUPRIN® 98/99™ Rim Exit Device



299 Strike



98 and 99 rim exit devices for all types of single and double doors with mullion, UL listed for Panic Exit Hardware. Devices are ANSI A156.3 – 2001 Grade 1. The 98 device has a smooth mechanism case and the 99 device has a grooved case. The rim device is non-handed except when the following device options are used: SD (Special Dogging), -2 (Double Cylinder) or SS (Signal Switch). See Opposite page for available outside trim and device functions. Covers stock hollow metal doors with 86 or 161 cutouts on single doors (may cover cutouts on pairs – consult template).




The 98/99 devices are available in the following finishes: US3, US4, US10, US26, US26D, US28, 313AN, 315AN and US32D for the 98 device only. See page 52 for component finishes and the inside cover for finish chips.




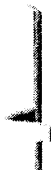
Specifications

Device Functions	Device ships EO/DT/NL. Field selectable. For TP,K, or L remove NL drive screw from device	
Device Lengths	3' 2'4" to 3' (711mm to 914 mm) Door Size	
	4' 2'10" to 4' (864 mm to 1219 mm) Door Size	
Strikes	299 – Dull Black Optional Strikes – see page 39	
Dogging Feature	Hex key dogging standard	
Dogging Options	CD Cylinder Dogging	see page 48
	SD Special Center Case Dogging	see page 48
	LD Less Dogging	see page 48
Electric Options	LX Latchbolt Monitor Switch	see page 42
	RX Pushpad Monitor Switch	see page 42
	RX2 Double Pushpad Monitor Switch	see page 42
	E Electric Locking & Unlocking	see page 44
	EL Electric Latch Retraction	see page 43
	SS Signal Switch	see page 43
	CX Chexit Delayed Exit	see page 45
	ALK Alarm Exit Kit	see page 42
Miscellaneous Options	PN Pneumatic Latch Retraction	see page 48
	-2 Double Cylinder	see page 48
	GBK Glass Bead Kit	see page 49
Fasteners & Sex Bolts (SNB)	Includes 1 ¾" (19mm) – 2 ¼" (57mm) Wood & Metal Doors Optional SNB available for device, see next page for quantities	
Latch Bolt	Deadlocking, ¾" (19mm) throw	
Device Centerline from Finished Floor	39 13/16" (1011 mm) 39 11/16" (1008 mm) with Mullion	
Center Case Dimensions	8" x 2 ¾" x 2 ¾" (203mm x 70mm x 60mm)	
Mechanism Case Dimensions	2 ¼" x 2 ¼" (57mm x 57mm)	
Projection	Pushbar Neutral – 3 13/16" (97 mm) Pushbar Depressed – 3 1/16" (78 mm)	

See page 53 for How to Order specification

VON DUPRIN® 98/99™ Rim Exit Device Standard Trim







	Exit only	Dummy Trim Pull when Dogged	Night Latch Key Retracts Latchbolt	Night Latch Key Retracts Latchbolt Optional Pull Required
				
Product Description	98EO 99EO	98DT 99DT	98NL 99NL	98NL-OP 99NL-OP
Trim Description	--	990DT	990NL-R/V	110NL-MD 110NL-WD
Escutcheon Plate Size	--	3" x 14 ³ / ₁₆ " x 3 ³ / ₃₂ " (76x360x2mm)	3" x 14 ³ / ₁₆ " x 3 ³ / ₃₂ " (76x360x2mm)	--
Pull Center to Center	--	5 ¹ / ₂ " (140mm)	5 ¹ / ₂ " (140mm)	--
Projection	--	2" (51mm)	2" (51mm)	--
ANSI Function	01	02	03	03
Cylinder Type	--	--	Rim	Rim
Optional Trim (See pages 32 – 34)	x990EO x992EO x994EO x996EO	x991K-DT x992L-DT x994L-DT x996L-DT x696DT x697DT	x991K-NL x992L-NL x994L-NL x996L-NL x696NL x697NL	
Optional #425 Sex Bolt Quantity for Device	6	2	2	6

	Lever Key Locks & Unlocks	Lever - Night Latch Key Retracts Latchbolt	Lever - Blank Escutcheon Always operable (No Cylinder)	Lever Dummy Trim Pull when Dogged
				
Product Description	98L 99L	98L-NL 99L-NL	98L-BE 99L-BE	98L-DT 99L-DT
Trim Description	996L-R/V	996L-NL-R/V	996L-BE-R/V	996L-DT-R/V
Escutcheon Plate Size	2 ³ / ₄ " x 10 ³ / ₄ " x 2 ⁷ / ₃₂ " (70x273x21mm)	2 ³ / ₄ " x 10 ³ / ₄ " x 2 ⁷ / ₃₂ " (70x273x21mm)	2 ³ / ₄ " x 10 ³ / ₄ " x 2 ⁷ / ₃₂ " (70x273x21mm)	2 ³ / ₄ " x 10 ³ / ₄ " x 2 ⁷ / ₃₂ " (70x273x21mm)
Pull Center to Center	--	--	--	--
Projection	2 ⁷ / ₈ " (73mm)	2 ⁷ / ₈ " (73mm)	2 ⁷ / ₈ " (73mm)	2 ⁷ / ₈ " (73mm)
ANSI Function	08	09	--	02
Cylinder Type	Rim	Rim	--	--
Optional Trim (See pages 32 – 34)	x992L x994L	x992L-NL x994L-NL	x992L-BE x994L-BE	x992L-DT x994L-DT
Optional #425 Sex Bolt Quantity for Device	2	2	2	2

For optional trims and functions see pages 32-34

VON DUPRIN[®] 98/99™ Optional Trim

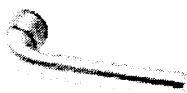
Knob and Thumbpiece Trim

	Knob Key Locks & Unlocks	Knob - Night Latch Key Retracts Latchbolt	Knob - Blank Escutcheon Always Operable (No Cylinder)	Knob - Dummy Trim Pull when Dogged	Thumbpiece Key Locks & Unlocks	Thumbpiece Blank Escutcheon Always Operable (No Cylinder)
						
Trim Description	991K	991K-NL	991K-BE	991K-DT	990TP	990TP-BE
Escutcheon Plate Size	2 3/4" x 10 3/4" x 27/32" (70x273x21mm)	2 3/4" x 10 3/4" x 27/32" (70x273x21mm)	2 3/4" x 10 3/4" x 27/32" (70x273x21mm)	2 3/4" x 10 3/4" x 27/32" (70x273x21mm)	2 3/4" x 10 3/4" x 27/32" (70x273x21mm)	2 3/4" x 10 3/4" x 27/32" (70x273x21mm)
Pull Center to Center	—	—	—	—	5 1/2" (140mm)	5 1/2" (140mm)
Projection	3 1/4" (83mm)	3 1/4" (83mm)	3 1/4" (83mm)	3 1/4" (83mm)	2" (51mm)	2" (51mm)
ANSI Function	08	09	—	02	05	05
Cylinder Type	Rim	Rim	—	—	Rim	—
Rim or Vertical Rod Device						
Mortise Lock Device	1 1/4" Mortise	1 1/4" Mortise	—	—	1 1/4" Mortise	—
#425 SNB optional-HMD Req. WD w/o SLM Pkg.	2	2	2	2	2	2
#825 SNB Req. WD w/o SLM Pkg. F Rim device ONLY	2	2	2	2	2	2
#425 SNB Req. w/ 499F	2	2	2	2	2	2

Lever Design Options



#01



#02



#03



#05



#06
Standard



#07



#12
Handed



#16



#17



#18

VON DUPRIN. 98/99™ Accessories and Door Handling

Dummy Pushpad



The 330 dummy pushpad is designed as a companion unit for all 99 devices. The 350 dummy pushpad is a companion unit for all 98 devices. The pushpad is rigid or nonfunctioning. A push/pull operation can be accomplished by using 990DT, 996DT trim or any Ives Pull.

The 330/350 can be equipped with a functional pushpad and will accommodate an RX switch. Specify RX-330. May also be equipped with the RX2, double RX switch. Specify RX2-330.

To order, specify:

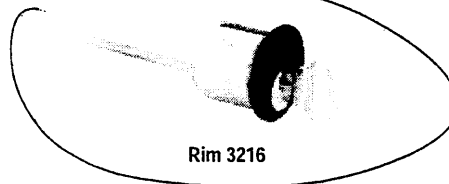
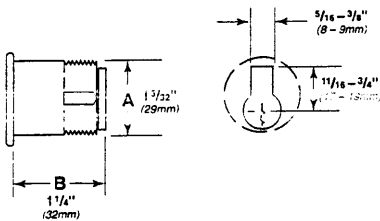
1. 330 or 350.
2. Size 3' or 4' (914mm or 1219mm)
3. Finish, US3, US4, US10, US26, US26D, US28, 313AN, 315AN, 350 Only US32D.

Cylinders

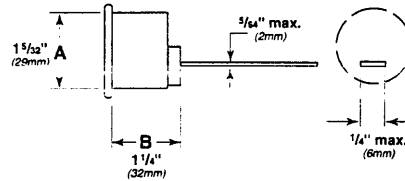
Cylinders are not furnished with device or trim and must be specified when ordering. Refer to trim pages for cylinder type.



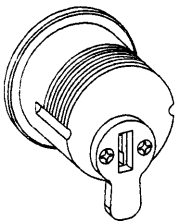
Mortise - 3215 (Schlage B502-191 cam)



Rim 3216

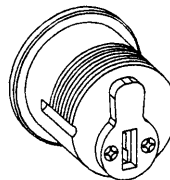


Dogged (Inverted) Cam



For Cylinder Dogging

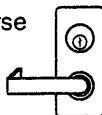
Undogged Cam (Standard Operations)



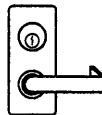
For Standard Trim Functions

Door Handling

Left Hand-Reverse
Orientation



Right Hand-Reverse
Orientation



LHR

(Left hand reverse)



RHR

(Right hand reverse)

Outside

D SERIES LEVERS

Extra Heavy Duty Commercial

D-Series locks are for commercial, institutional and industrial use, such as schools, hospitals and factories, where a long life of dependable operation must be combined with a high degree of resistance to physical abuse.

Popular functions of all lever designs are also available in Vandlgard®, where levers are free-wheeling in the locked position to resist more forceful attacks.

Performance Features

Tested to exceed 3,000,000 cycles, greatly exceeding the 800,000 cycle ANSI Grade 1 requirement.

Exceeds ANSI A156.2 Series 4000 Grade 1 locked lever torque requirements.

Vandlgard® functions have free-wheeling levers to resist force when locked.

Independent heavy duty spring cages for effective lever support.

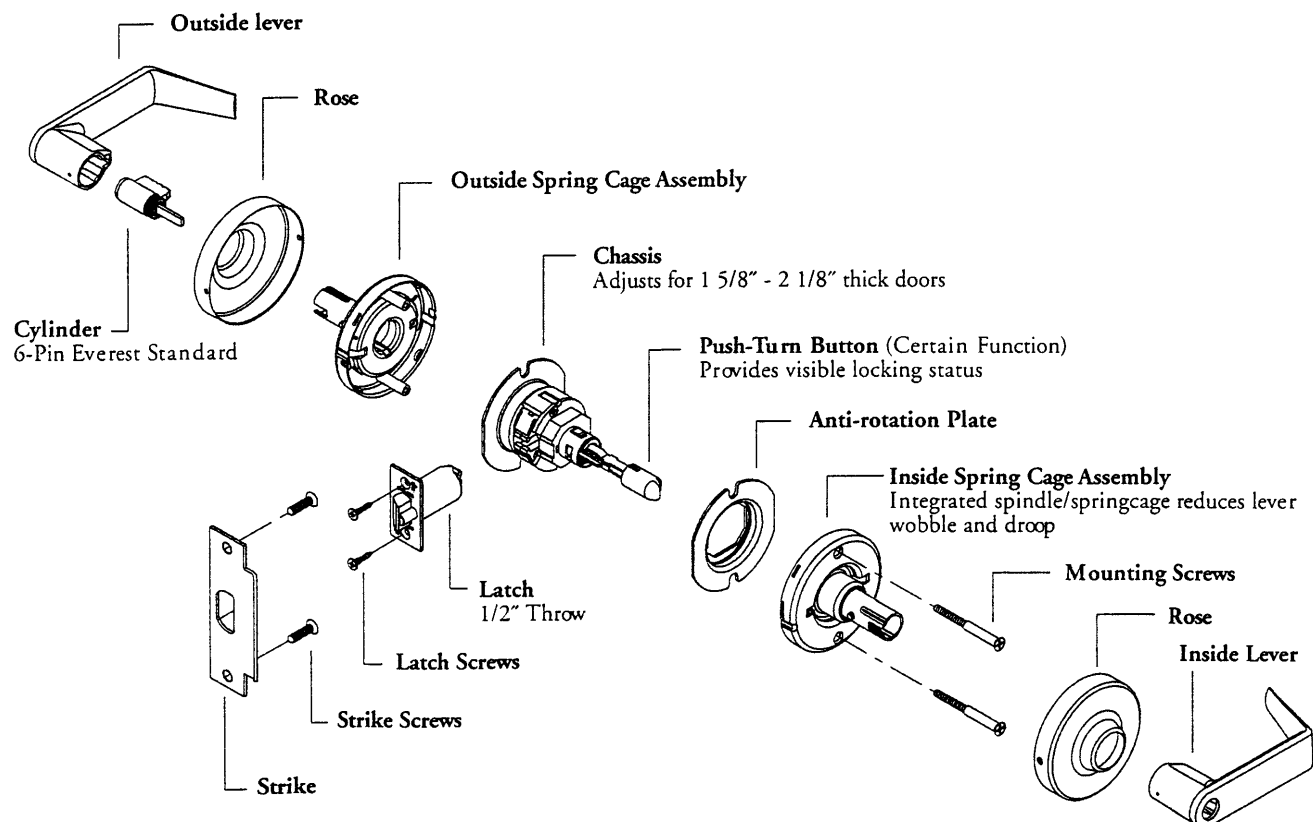
Thru-bolted mechanism for positive interlock to door.

Concealed mounting screws.

Steel Latchbolt.

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Cylinders	8
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Door Preparation	3
Door Handling	12
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Exploded View



Specifications

Handing:

All D-Series lever locksets are non-handed.

Door Thickness:

1 $\frac{3}{8}$ " to 2 $\frac{1}{8}$ " (41mm–54mm) standard including Vandlgard® functions.

See accessories (Page 12) for spacers required for 1 $\frac{3}{8}$ " doors.

Backset:

2 $\frac{3}{4}$ " (70mm) standard. 2 $\frac{3}{8}$ ", 3 $\frac{3}{4}$ " and 5" (60mm, 95mm, 127mm) optional.

Faceplate:

Brass, bronze or stainless steel. 1 $\frac{1}{8}$ " x 2 $\frac{1}{4}$ " (29 mm x 57mm) square corner, beveled.

Lock Chassis:

Zinc plated for corrosion resistance.

Latch Bolt:

Steel, $\frac{1}{2}$ " (12mm) throw, deadlocking on keyed and exterior functions. $\frac{3}{4}$ " (19mm) throw anti-friction latch available for pairs of fire doors.

Exposed Trim:

Levers: Pressure cast zinc, plated to match finish symbols.
Roses: Solid brass.

Strike:

ANSI curved lip strike 1 $\frac{1}{4}$ " x 4 $\frac{7}{8}$ " x 1 $\frac{3}{16}$ " lip to center standard. Optional strikes, lip lengths and ANSI strike box available. See page 11.

Cylinder & Keys:

6-pin Everest C123 keyway standard with two patented nickel silver keys per lock.

Keying Options:

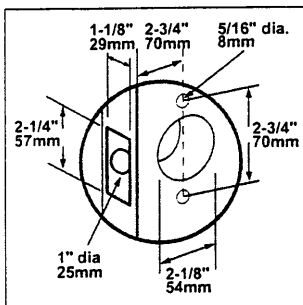
Interchangeable core and Primus® high security cylinders. Master keying, grand master keying and construction keying.

Warranty:

Seven-year limited for all functions including Vandlgard®.

Door Preparation

Lever Designs



Certifications

ANSI

Meets or exceeds A156.2 Series 4000, Grade 1 strength and operational requirements. Meets A117.1 Accessibility Code.

Federal

Meets FF-H-106C Series 161.

California State Reference Code

(Formerly Title 19, California State Fire Marshal Standard)

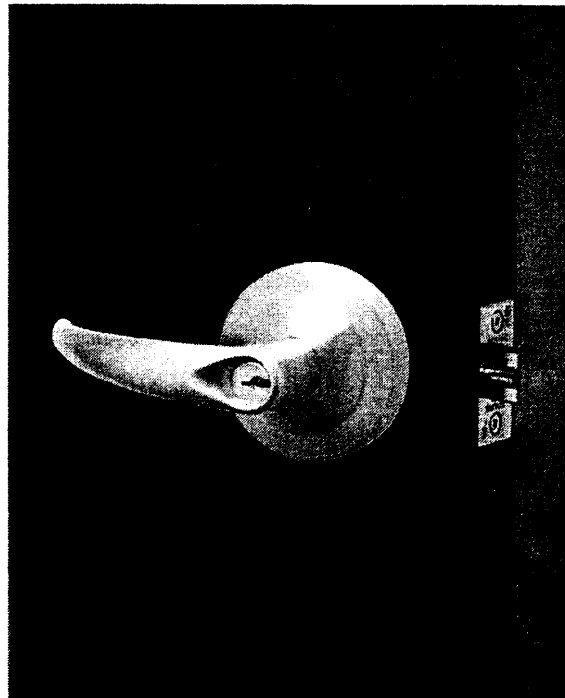
All levers with returns comply; levers return to within $\frac{1}{2}$ " of door face.

UL / cUL:

All locks listed for A label single doors, 4' x 8'.

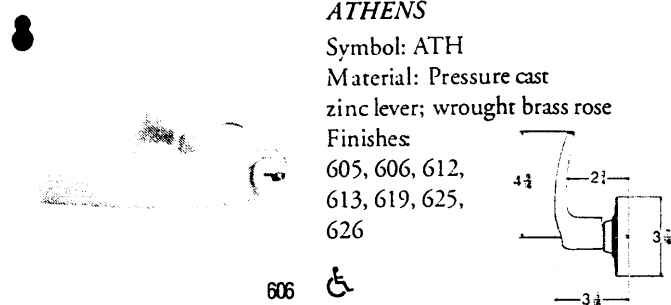
Letter F and UL symbol on latch front indicate listing. Electrified functions are UL19X Listed for single point locking applications.

UL437 Listed locking cylinder optional: specify Primus 20-500 Series cylinder.

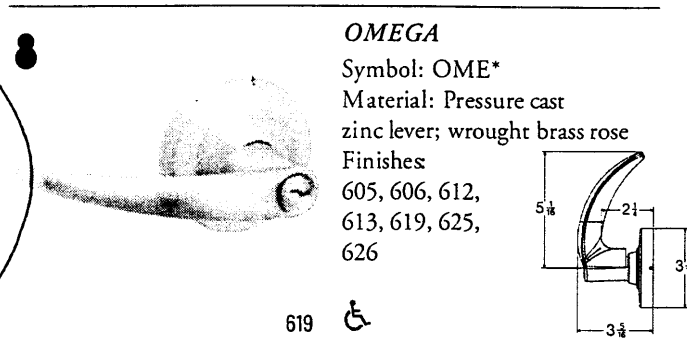
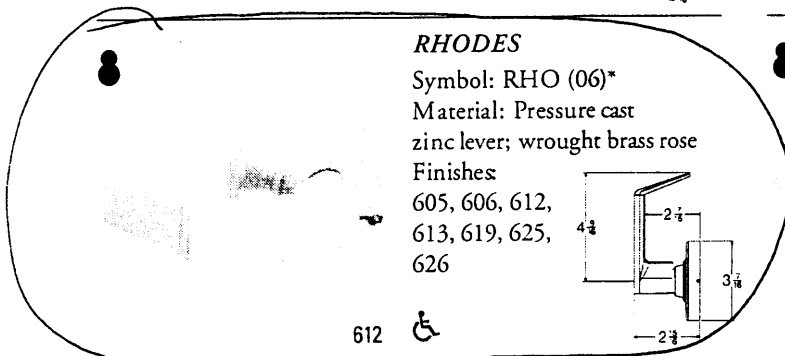
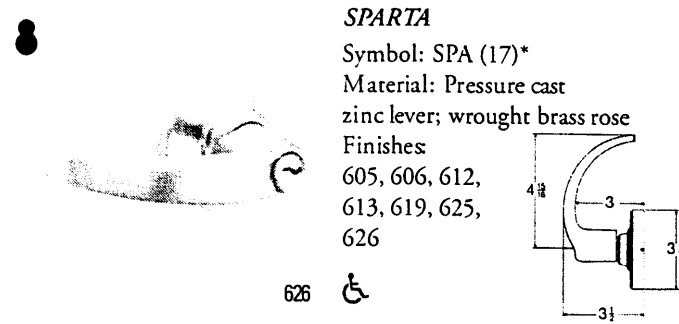


D SERIES LEVERS

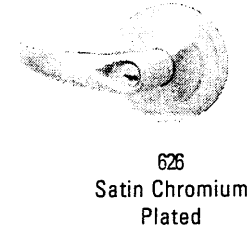
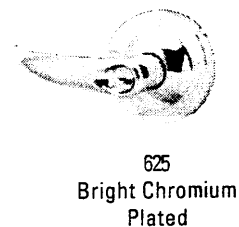
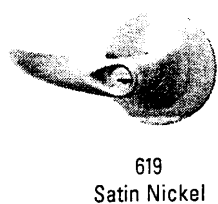
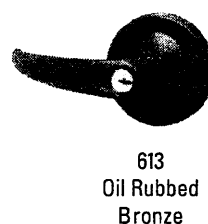
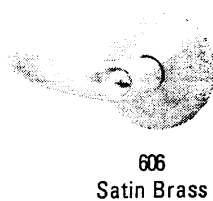
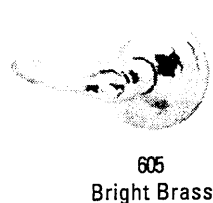
Lever Designs & Finishes



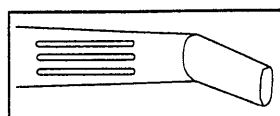
Lever Designs & Finishes



* Trim available with CM5200 Series Locksets



Keyed functions available with interchangeable core options. Levers are available for full size and small format interchangeable cores.



TACTILE WARNING (KNURLING)

Change symbol designation as follows:

8AT for Athens*

8RO for Rhodes

8SP for Sparta

Finishes

605 Bright Brass

606 Satin Brass*

612 Satin Bronze

613 Oil Rubbed Bronze

619 Satin Nickel

625 Bright Chromium Plated

626 Satin Chromium Plated

Only outside lever is knurled unless otherwise specified.

Not available with Omega trim

D SERIES LEVERS

Functions

Non-Keyed Locks

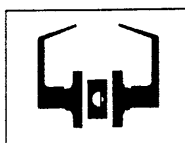
SCHLAGE ANSI

ND10S F75



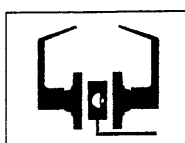
Passage Latch
Both knobs always unlocked.

ND12D F89



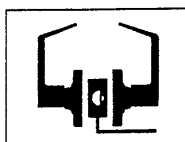
Exit Lock
Outside lever always fixed. Inside lever always unlocked.

ND12DEL



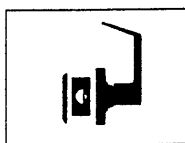
Electrically Locked (Fail Safe)
Outside lever continuously locked electrically. Unlocked by switch or power failure. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit.

ND12DEU



Electrically Unlocked (Fail Secure)
Outside lever continuously locked until unlocked by electric current. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit.

ND25D



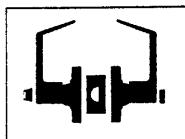
Exit Lock
Blank plate outside. Inside lever always unlocked.

ND40S F76



Bath/Bedroom Privacy Lock
Push-button locking. Can be opened from outside with small screwdriver. Turning inside lever or closing door releases button.

ND44S



Hospital Privacy Lock
Push-button locking. Unlocked from outside by turning emergency turn-button. Turning inside lever or closing door releases button.

ND170



Single Dummy Trim
Dummy trim for one side of door. Used for door pull or as matching inactive trim.

Keyed Locks

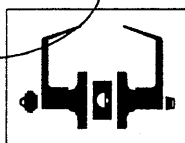
SCHLAGE ANSI

ND50PD F82



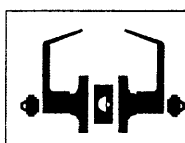
Entrance/Office Lock*
Push-button locking. Push-button locks outside lever until unlocked with key or by turning inside lever.

ND53PD F109



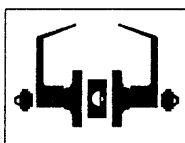
Entrance Lock*
Turn/push-button locking; pushing and turning button locks outside lever, requiring use of key until button is manually unlocked. Push-button locking; pushing button locks outside lever until unlocked by key or by turning inside lever.

ND60PD F88



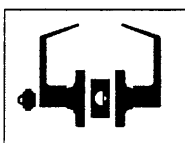
Vestibule/Classroom Security Lock*
Latch retracted by key from outside when outside lever is locked by key in inside lever. Inside lever is always unlocked.

ND66PD F91



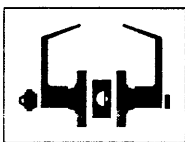
Store Lock**
Key in either lever locks or unlocks both levers.

ND70PD F84



Classroom Lock*
Outside lever locked and unlocked by key. Inside lever always unlocked.

ND73PD F90



Corridor Lock*
Outside lever locked by key outside or push-button inside. Push-button released by rotating inside lever or closing door. When outside lever is locked by key, key must be used to unlock it. Inside lever is always unlocked.

* Available functions for small format interchangeable core.

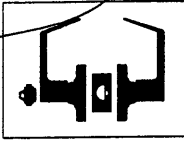
† Caution: Double cylinder locks on residences and any door in any structure which is used for egress are a life safety hazard in times of emergency and their use is not recommended. Installation should be in accordance with existing codes only.

Functions

Keyed Locks

SCHLAGE ANSI

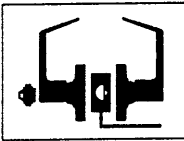
ND80PD F86



Storeroom Lock*

Outside lever fixed. Entrance by key only. Inside lever always unlocked.

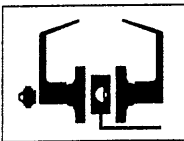
ND80PDEL



Electrically Locked (Fail Safe)*

Outside lever continuously locked electrically. Unlocked by key outside or by switch or power failure. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit.

ND80PDEU



Electrically Unlocked (Fail Secure)*

Outside lever continuously locked until unlocked by key or electric current. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit.

ND82PD F87



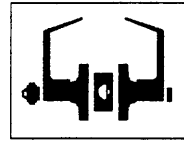
Institution Lock*†

Both levers fixed. Entrance by key in either lever.

Vandlgard Functions

SCHLAGE ANSI

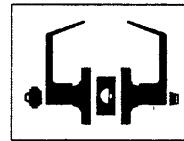
ND91PD F82



Entrance/Office Lock*

Push-button locking. Push-button disengages outside lever until unlocked with key or by turning inside lever. Vandlgard is designed to disengage outside spindle from latch when in locked condition.

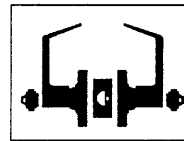
ND92PD F109



Entrance Lock*

Turn/push-button locking; pushing and turning button disengages outside lever, requiring use of key until button is manually unlocked. Push-button locking; pushing button disengages outside lever until unlocked by key or by turning inside lever. Vandlgard is designed to disengage outside spindle from latch when in locked condition.

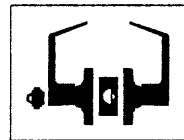
ND93PD F88



Classroom Security Lock*

Latch retracted by key from outside when outside lever is disengaged by key in inside lever. Inside lever is always unlocked. Vandlgard is designed to disengage outside spindle from latch when in locked condition.

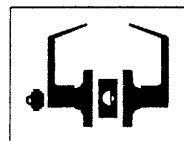
ND94PD F84



Classroom Lock*

Outside lever disengaged and unlocked by key. Inside lever always unlocked. Vandlgard is designed to disengage outside spindle from latch when in locked condition.

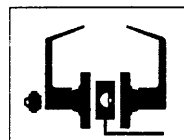
ND96PD F86



Storeroom Lock*

Outside lever always disengaged. Entrance by key only. Inside lever always unlocked. Vandlgard is designed to disengage outside spindle from latch when in locked condition.

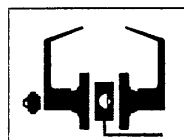
ND96PDEL



Electrically Locked (Fail Safe)*

Outside lever continuously disengaged electrically. Unlocked by key outside or by switch or power failure. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit. Vandlgard is designed to disengage outside spindle from latch when in locked condition.

ND96PDEU



Electrically Unlocked (Fail Secure)*

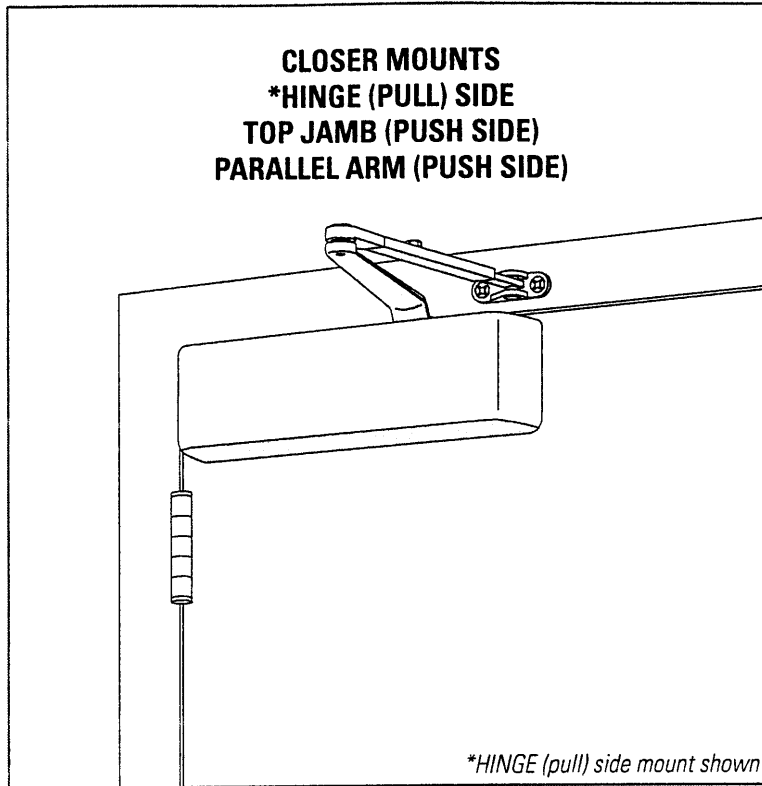
Outside lever continuously disengaged until unlocked by key or electric current. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit. Vandlgard is designed to disengage outside spindle from latch when in locked condition.

* Available functions for small format interchangeable core.

† Caution: Double cylinder locks on residences and any door in any structure which is used for egress are a life safety hazard in times of emergency and their use is not recommended. Installation should be in accordance with existing codes only.

LCN 4040 SERIES

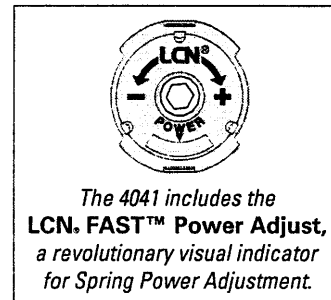
FEATURES



The 4040 SUPER SMOOTHIE® is LCN's most flexible heavy duty closer designed for institutional and other rugged high traffic applications.

- ▶ Ten Million Cycles
- ▶ Cast Iron
- ▶ Forged Steel Arm
- ▶ Double Heat Treated Steel Pinion
- ▶ All Weather Fluid
- ▶ Non-Handed
- ▶ LCN® Fast™ Power Adjust
- ▶ Fast & Accurate Installation
- ▶ UL & ULC Listed

- ▶ Standard 4040 series closer shipped with regular arm, standard plastic cover, and self reaming and tapping screws. See 4040 Series pages 34 & 35 for options.
- ▶ Non-sized cylinder is adjustable for interior doors to 5'0" and exterior doors to 4'0".
- ▶ Closer mounts hinge side, top jamb, and parallel arm w/PA Shoe on either right or left swinging doors.
- ▶ Closers to meet ADA requirements. See 4040 Series page 36.
- ▶ Standard or optional custom powder coat finish.
- ▶ Optional plated finish on cover, arm, and fasteners.
- ▶ Optional SRI primer for installations in corrosive conditions.
- ▶ Optional designer series metal cover
- ▶ UL and ULC listed for self-closing doors without hold-open.
- ▶ Tested and certified under ANSI Standard A156.4, grade one.



MOUNTING					FINISH		COVER		CYLINDER				**ARM FUNCTION						
HINGE (PULL) SIDE TOP JAMB (PULL) TOP JAMB (PUSH) PARALLEL ARM STOP FACE					POWDER COAT PLATED		PLASTIC METAL DESIGNER METAL		NON-HANDED NON-SIZED ACCESSIBILITY DELAYED ACTION AVB**				REGULAR (DOUBLE) STANDARD (SINGLE) HOLD-OPEN FUSIBLE LINK EDA/HEDA CUSH/HCUSH SCUSH/HCUSH						
●	○	●	●	○	●	●	●	●	●	●	○	○	120°	○	120°	○	180°	110°	110°

- Available
- Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
 **Maximum opening/hold-open point with standard template.
 *** Advanced Variable Backcheck

LCN®

29

LCN CLOSERS
 121 W. RAILROAD AVE.
 P.O. BOX 100
 PRINCETON, IL, USA 61356-0100

PHONE 800-526-2400
 FAX 800-248-1460
 www.lcnclosers.com
 3/04

LCN 4040 SERIES

MOUNTING DETAILS

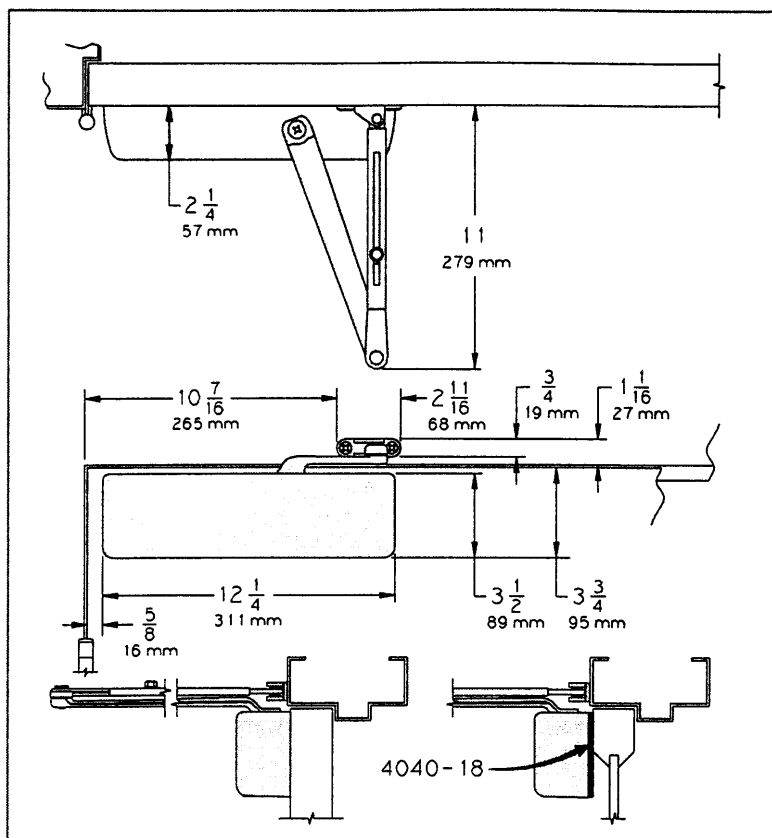
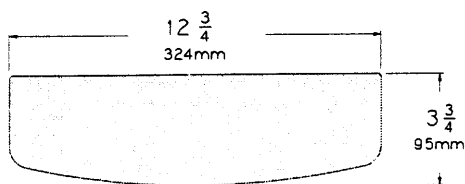
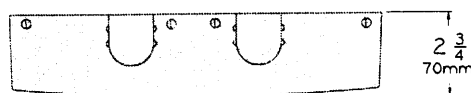
HINGE (PULL) SIDE MOUNTING

MAXIMUM OPENING

Templating allows up to 120°.

Hold-open points 90° up to 120° with hold-open arm.

Optional, Non-handed Designer Series Metal Cover



- ▶ **Butt Hinges** should not exceed 5" (127 mm) in width.
- ▶ **Auxiliary Stop** is recommended at hold-open point or where a door cannot swing beyond 120°.
- ▶ **Reveal** should not exceed 3/4" (19 mm) for regular arm or hold-open arm.
- ▶ **Top Rail** less than 3 3/4" (95 mm) requires PLATE, 4040-18. Plate requires 2" (51 mm) minimum. With Designer Series metal cover, use PLATE, 4040-18DS1
- ▶ **Clearance** of 2 3/8" (60 mm) behind door required for 90° installation. 2 7/8" (73 mm) for Designer Series metal covers
- ▶ **Delayed Action** Add suffix "DEL" to selected cylinder (eg. 4041 DEL). Delays closing from 120° to 70°. Delay time adjustable up to approximately 1 minute.
- ▶ **Bull Nose Trim** requires SOFFIT SHOE, 4040-65.
- ▶ **Corner Bracket** available for doors where top jamb or parallel arm mounting can not be used. 4040-16 allows 110° opening. Projects 5" (127 mm) from stop, 12 13/16" (325 mm) from frame. 4040-17 allows 100° opening with certain auxiliary door holders (consult factory). Projects 6 3/8" (162 mm) from stop, 13 11/16" (348 mm) from frame.

Options

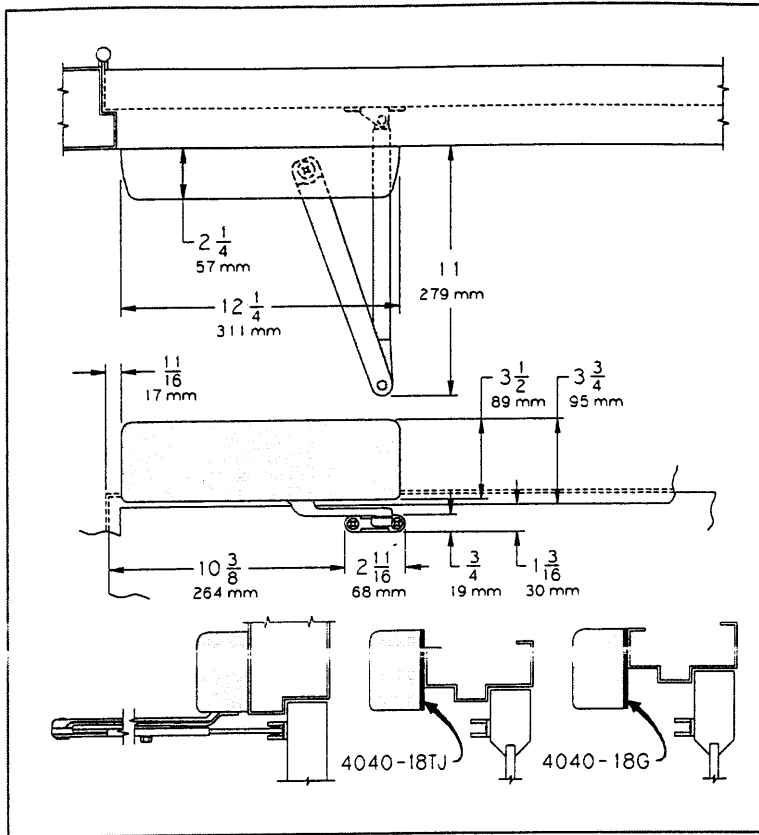
- ▶ Delayed action cylinder.
- ▶ Hold-open arm.
- ▶ Metal or lead lined cover.
- ▶ Corner bracket.
- ▶ Designer Series metal cover.

Special Templates

Customized installation templates or products may be available to solve unusual applications. Contact LCN for assistance.

LCN 4040 SERIES

MOUNTING DETAILS



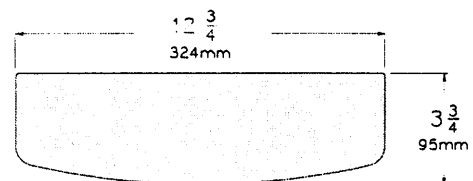
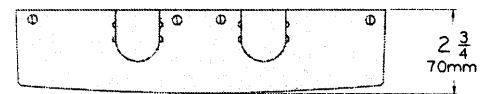
TOP JAMB (PUSH SIDE) MOUNTING

MAXIMUM OPENING

Templating allows up to 120°.

Hold-open points 85° up to 120° with hold-open arm.

Optional, Non-handed Designer Series Metal Cover



- ▶ **Butt Hinges** should not exceed 5" (127 mm) in width.
- ▶ **Auxiliary Stop** is recommended at hold-open point or where the door cannot swing 120°.
- ▶ **Reveal** of 2 9/16" (65 mm) allows 120° opening for REGULAR ARM or standard HOLD-OPEN ARM. 4 13/16" (122 mm) allows up to 120° opening with LONG ARM where standard rod and shoe is replaced with optional LONG ROD AND SHOE 4040-79LR. Use H-LONG ARM with LONG HEAD AND TUBE, 4040-78HL for hold-open. 8" (203 mm) allows up to 120° opening with EXTRA LONG ARM where standard rod and shoe is replaced with optional EXTRA LONG ROD AND SHOE, 4040-79ELR.
- ▶ **Top Rail** requires 1 1/4" (32 mm) minimum.
2 1/4" (57 mm) minimum with closer on PLATE, 4040-18TJ.
3" (76 mm) minimum with closer on PLATE, 4040-18G. With Designer Series metal cover, use PLATE, 4040-18TJDS1
- ▶ **Head Frame** less than 3 1/2" (89 mm) requires PLATE, 4040-18TJ. With flush ceiling, use PLATE, 4040-18G.
Either plate requires 1 3/4" (44 mm) minimum.
- ▶ **Delayed Action** Add suffix "DEL" to selected cylinder (eg. 4041 DEL). Delays closing from 120° to 80°. Delay time adjustable up to approximately 1 minute.

Options

- ▶ Delayed action cylinder.
- ▶ Long arm, extra long arm, hold-open arm, long hold-open arm.
- ▶ Metal or lead lined cover.
- ▶ Designer Series metal cover.

Special Templates

Customized installation templates or products may be available to solve unusual applications. Contact LCN for assistance.

LCN 4040 SERIES

PARALLEL ARM (PUSH SIDE) MOUNTING

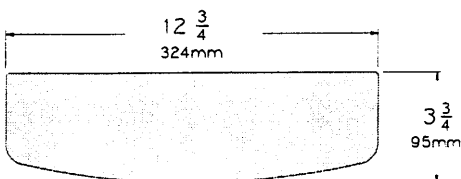
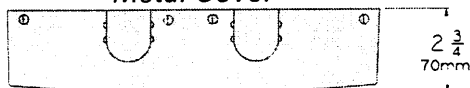
Optional mounting requires PA SHOE, 4040-62PA for REGULAR or HOLD-OPEN arms. Add prefix "P" to closer description (eg. P4041). P4041 closer includes 4040-201 FIFTH HOLE SPACER to support PA SHOE.

MAXIMUM OPENING

180° opening/hold-open points with all except CUSH arms.

110° opening/hold-open with CUSH arms.

Optional, Non-handed Designer Series Metal Cover

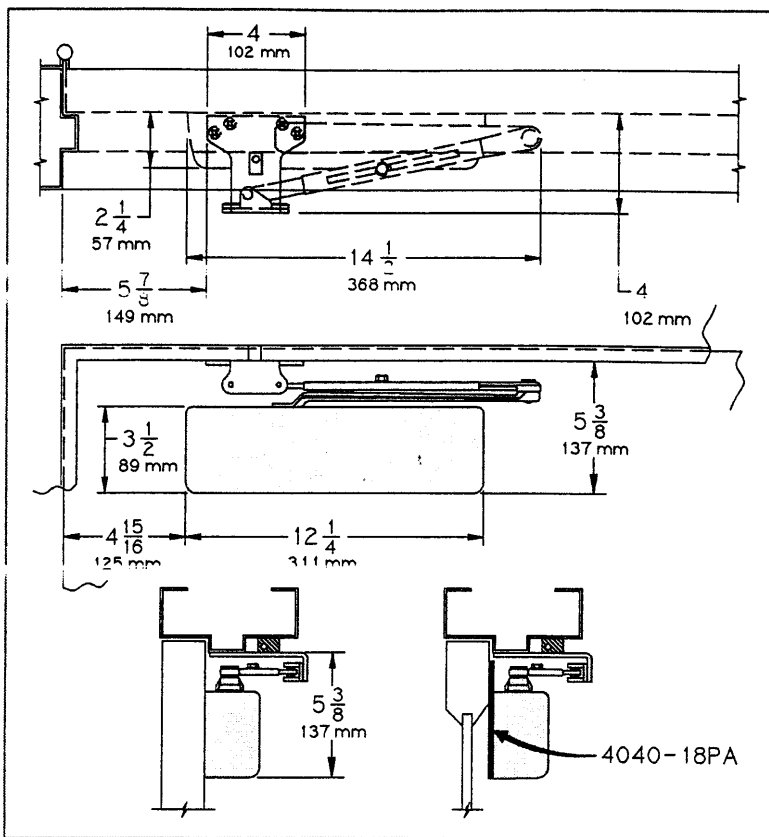


Options

- ▶ Delayed action cylinder.
- ▶ Hold-open, EDA, HEDA, CUSH, HCUSH, SPRING CUSH, or SPRING HCUSH arm.
- ▶ Metal or lead lined cover.
- ▶ Designer Series metal cover.

Special Templates

Customized installation templates or products may be available to solve unusual applications. Contact LCN for assistance.

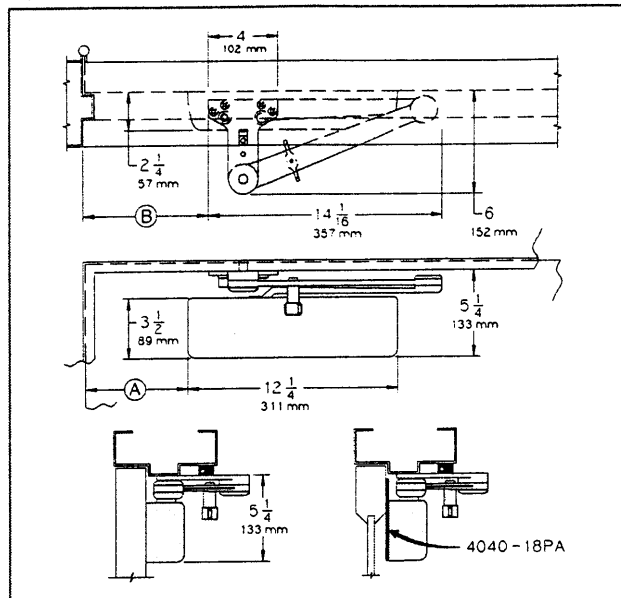


4040 REGULAR or HOLD-OPEN MOUNT

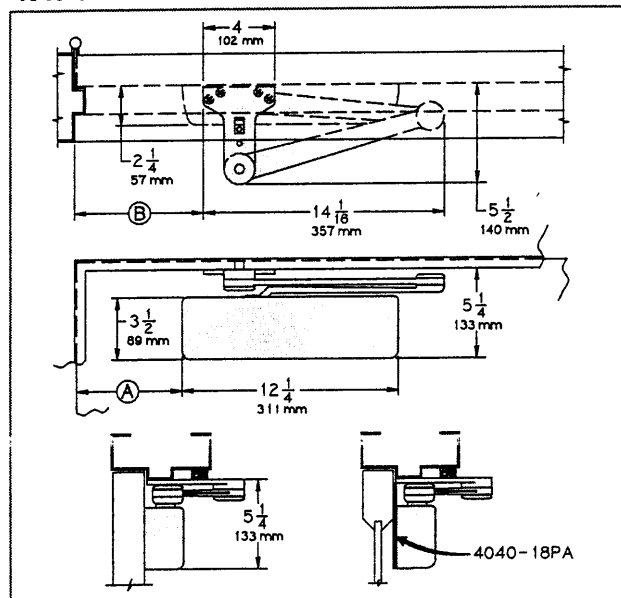
- ▶ **Butt Hinges** should not exceed 5" (127 mm) in width.
- ▶ **Auxiliary Stop** is recommended at hold-open point, where the door cannot swing 180°, or where CUSH-N-STOP arm is not used.
- ▶ **Clearance** for 4040-62PA shoe is 4" (102 mm) from door face. EDA shoe projects 5 1/2" (140 mm) from door face. CUSH shoe projects 6" (152 mm) from door face.
- ▶ **Top Rail** less than 5 3/8" (137 mm) measured from the stop requires PLATE, 4040-18PA. Plate requires 2" (51 mm) minimum from the stop. With Designer Series metal cover, use PLATE, 4040-18PADS1
- ▶ **Head Frame** flush or rabbetted requires PA SHOE ADAPTER, 4040-418.
- ▶ **Stop Width** minimum 1" (25 mm). CUSH arm requires minimum 1 1/2" (38 mm).
- ▶ **Blade Stop** clearance requires 1/2" (13mm) BLADE STOP SPACER, 4040-61.
- ▶ **Delayed Action** Add suffix "DEL" to selected cylinder (eg. P4041 DEL). Delays time adjustable up to approximately 1 minute.

LCN 4040 SERIES

4040 EDA MOUNT



4040 CUSH MOUNT



- ▶ **Clearance** for 4040-62EDA is 5 1/2" (140 mm) from door face. 6" (152 mm) for CUSH.
- ▶ **Head Frame** flush or rabbetted requires CUSH FLUSH PANEL ADAPTER, 4040-419.
- ▶ **CUSH ARM** requires SHOE SUPPORT, 4040-30 for fifth screw anchorage for narrow frames.
- ▶ **Delayed Action** Add suffix "DEL" to selected cylinder (eg. 4041 DEL). Delays closing from maximum opening to:
 - 115° with 180° template.
 - 95° with 110° template.
 - 85° with 100° template.
 - 75° with 90° template.
 Delay time adjustable up to approximately one minute.

Mounting details are the same as 4040 REGULAR or HOLD-OPEN except as listed below. 4040 closers ordered with EDA or CUSH arms include 4040-201 FIFTH HOLE SPACER to support the shoe.

MAXIMUM OPENING

EDA arm can be templated for points at: 110°,

Ⓐ = 6 3/8" (162 mm)

Ⓑ = 7 3/4" (197 mm)

or 180°.

Ⓐ = 2 7/8" (73 mm)

Ⓑ = 4 1/4" (108 mm)

Hold-open points up to maximum opening with HEDA arm.

CUSH arms can be templated for opening/hold-open point at: 85°,

Ⓐ = 7 15/16" (202 mm)

Ⓑ = 9 1/8" (232 mm)

90°,

Ⓐ = 7 3/16" (183 mm)

Ⓑ = 8 1/2" (216 mm)

100°,

Ⓐ = 6 1/16" (154 mm)

Ⓑ = 7 1/4" (184 mm)

or 110°.

Ⓐ = 5 1/16" (129 mm)

Ⓑ = 6 3/8" (162 mm)

Spring Cush dead stop points are approximately 5° more than templated stop point. Hold open at templated stop points.