

PROJECT NO.:
DATE:

PROJECT NAME
PROJECT LOCATION

SECTION 10 5113.15
LOCKER DOORS MULTI-FUNCTION DIGITAL LOCKS

PART 1 - GENERAL

1.01 SECTION INCLUDES Multi-function digital combination lock for use with flat front lockers.

1.02 RELATED REQUIREMENTS

A. Section 10 5100 – Lockers: Refer to this section for locker related information.

1.03 PRICE AND PAYMENT PROCEDURES

A. See Section 01 21 00 - Allowances, for allowances affecting this section.

B. See Section 01 22 00 – Unit Prices, for unit prices affecting this section.

1.04 SUBMITTALS See Section 01 3000 – Administrative Requirements, for submittal procedures.

B. Product Data: Submit product data on digital locker locks, sizes and configurations.

C. Shop Drawings: Submit locker plan layout, direction of door swing, and locker numbering plan with lock types and locations.

1. Submit design of customized logo as required for front module.

D. Installation Instructions: Submit digital locker locks manufacturer's installation instructions.

E. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing specified products with at least three years of documented experience.

1.06 WARRANTY

A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.

B. Provide two year manufacturer warranty for multi-function digital combination locks.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. **Lowe & Fletcher Inc.:** www.loweandfletcherinc.com
1. Location: 124 James St., Holland, Michigan 49424.
 2. Phone: (616) 994-0490; Fax: (616) 994-0480.
 3. Email: sales@loweandfletcherinc.com

2.02 COMPONENTS

A. Multi-Function Digital Combination Locks, **Product ID 3780 - Standard:** Outer module design that mounts onto outside of locker door with three screw holes and spindle hole, and inner cam latch.

1. Keypad Module: Consisting of “zero thru nine” buttons, mechanical override key, multi-function LED light display, and three screw holes for attachment to locker door panel.
 - a. Finish, Powder Coat: **[Black] [White] [Silver] or [Custom color as selected by Architect].**
 - b. Material: Zinc alloy.
 - c. Size: 1-7/16 inch (37 mm) wide by 5-3/8 inch (136 mm) long and 1-1/16 inch (27 mm) deep at bottom end and 7/8 inch (23 mm) deep at top end.
 - d. Spindle: **[13/16 inch (20 mm)] or [15/16 inch (24 mm)]** long, 5/8 inch (16 mm) diameter.

AUTHOR
FILE NAME

LOCKER DOORS MULTI-FUNCTION DIGITAL LOCKS
10 5113.15 - 1

PROJECT NO.:
DATE:

PROJECT NAME
PROJECT LOCATION

- e. Mounting Screws: Pan-head machine screws (M4), 3/16 inch (4.5 mm) diameter holes, use upper screw located behind logo button, and use one or both of the other two screws to mount lock.
 - 1) Provide screw length to suit door thickness.
 - f. Mounting Configuration: **[Standard vertical]** **[Left hand horizontal]** or **[Right hand horizontal]**.
 - g. Cam: Attached to square shaft at end of spindle with M4 screw and domed washer, provide cam type to suit locker door and frame.
 - h. Logo: **[Standard]** or **[Customized logo as indicated on Shop Drawings]**.
 - 2. Power Supply: Includes two AA (1.5 volt) batteries.
 - a. Battery level indicated by pressing “Logo” button twice, refer to battery condition indicator details on manufacturer’s programming instructions for additional information.
 - 3. Digital Locking Features:
 - a. Pre-program digital combination locks for **[daily use in public mode]** or **[permanent assignment in private mode]**.
 - 1) Mode setting may be changed at any time by site manager.
 - b. Pre-program digital combination locks for specific **[user code]** and/or **[master code]**.
 - 1) User Code: Four (4) digits long, used to open and close lock.
 - 2) Sub-Master Code: Six (6) digits long.
 - 3) Master Code: Eight (8) digits long, used by site manager.
 - c. Provide automatic timed unlock option.
 - d. Provide **[standard]** or **[custom]** mechanical override key.
 - 1) Ensures locker can be opened in event of emergency.
 - 2) Allows for access without losing current User’s code.
 - e. Five multi-function light emitting diodes (LED) on the keypad module flash either “green” or “red” depending on function being displayed, refer to manufacturer’s programming instructions for additional details.
- B. Multi-Function Digital Combination Locks, **Product ID 2382 – Slam Lock**: Outer module design that mounts onto outside of locker door with three screw holes and spindle hole, and inner module latch-set.
- 1. Keypad Module: Consisting of “zero thru nine” buttons, mechanical override key, multi-function LED light display, and three screw holes for attachment to locker door panel.
 - a. Finish, Powder Coat: **[Black]** **[White]** **[Silver]** or **[Custom color as selected by Architect]**.
 - b. Material: Zinc alloy.
 - c. Size: 1-7/16 inch (37 mm) wide by 5-3/8 inch (136 mm) long and 1-1/16 inch (27 mm) deep at bottom end and 7/8 inch (23 mm) deep at top end.
 - d. Spindle: 5/8 inch (16 mm) diameter.
 - e. Mounting Screws: Pan-head machine screws (M4), 3/16 inch (4.5 mm) diameter holes, use upper screw located behind logo button, and use one or both of the other two screws to mount lock.
 - 1) Provide screw length to suit door thickness.
 - f. Mounting Configuration: **[Standard vertical]** **[Left hand horizontal]** or **[Right hand horizontal]**.
 - g. Inner Module Latch-Set: Aligned with spindle, and attached to locker door panel.
 - 1) Size: 5/8 inch (15.6 mm) thick, 1-15/16 inch (50 mm) wide with two support holes at 2-1/8 inch (54.6 mm) on center, and with latch-set 3/8 inch (9 mm) long.
 - h. Logo: **[Standard]** or **[Customized logo as indicated on Shop Drawings]**.
 - 2. Power Supply: Includes two AA (1.5 volt) batteries.
 - a. Battery level indicated by pressing “Logo” button twice, refer to battery condition indicator details on manufacturer’s programming instructions for additional information.
 - 3. Digital Locking Features:
 - a. Pre-program digital combination locks for **[daily use in public mode]** or **[permanent assignment in private mode]**.
 - 1) Mode setting may be changed at any time by site manager.
 - b. Pre-program digital combination locks for specific **[user code]** and/or **[master code]**.
 - 1) User Code: Four (4) digits long, used to open and close lock.
 - 2) Sub-Master Code: Six (6) digits long.
 - 3) Master Code: Eight (8) digits long, used by site manager.
 - c. Provide automatic timed unlock option.
 - d. Provide **[standard]** or **[custom]** mechanical override key.
 - 1) Ensures locker can be opened in event of emergency.
 - 2) Allows for access without losing current User’s code.

AUTHOR
FILE NAME

LOCKER DOORS MULTI-FUNCTION DIGITAL LOCKS
10 5113.15 - 2

PROJECT NO.:
DATE:

PROJECT NAME
PROJECT LOCATION

- e. Five multi-function light emitting diodes (LED) on the keypad module flash either “green” or “red” depending on function being displayed, refer to manufacturer’s programming instructions for additional details.
- C. Wet Area Digital Combination Locks, **Product ID 3781 – For Wet and Chlorinated Locker Areas**: Outer module design that mounts onto outside of locker door with three screw holes and spindle hole, and inner cam latch.
- 1. Keypad Module: Consisting of “zero thru nine” buttons, mechanical override key, multi-function LED light display, and three screw holes for attachment to locker door panel.
 - a. Finish, Powder Coat: **[Black] [Silver] [White]** or **[Custom color as selected by Architect]**.
 - b. Material: Zinc alloy.
 - c. Size: 1-5/8 inch (41 mm) wide by 5-1/2 inch (140 mm) long and 1-1/4 inch (31 mm) deep at bottom end and 1 inch (25 mm) deep at top end.
 - d. Spindle: **[13/16 inch (20 mm)]** or **[15/16 inch (24 mm)]** long with 1/4 inch (6.3 mm) spindle extension, 11/16 inch (17 mm) diameter.
 - e. Mounting Screws: Pan-head machine screws (M4), 3/16 inch (4.5 mm) diameter holes, use upper screw located behind logo button, and use one or both of the other two screws to mount lock.
 - 1) Provide screw length to suit door thickness.
 - f. Mounting Configuration: **[Standard vertical] [Left hand horizontal]** or **[Right hand horizontal]**.
 - g. Cam: Attached to square shaft at end of spindle with M4 screw and domed washer, provide cam type to suit locker door and frame.
 - h. Logo: **[Standard]** or **[Customized logo as indicated on Shop Drawings]**.
 - 2. Power Supply: Includes two AA (1.5 volt) batteries.
 - a. Battery level indicated by pressing “Logo” button twice, refer to battery condition indicator details on manufacturer’s programming instructions for additional information.
 - 3. Digital Locking Features:
 - a. Pre-program digital combination locks for **[daily use in public mode]** or **[permanent assignment in private mode]**.
 - 1) Mode setting may be changed at any time by site manager.
 - b. Pre-program digital combination locks for specific **[user code]** and/or **[master code]**.
 - 1) User Code: Four (4) digits long, used to open and close lock.
 - 2) Sub-Master Code: Six (6) digits long.
 - 3) Master Code: Eight (8) digits long, used by site manager.
 - c. Provide automatic timed unlock option.
 - d. Provide **[standard]** or **[custom]** mechanical override key.
 - 1) Ensures locker can be opened in event of emergency.
 - 2) Allows for access without losing current User’s code.
 - e. Five multi-function light emitting diodes (LED) on the keypad module flash either “green” or “red” depending on function being displayed, refer to manufacturer’s programming instructions for additional details.
- D. ADA Compliant Digital Combination Locks, **Product ID 3782 – ADA (American Disability Act)**: Outer module design with extended operating handle that mounts onto outside of locker door with three screw holes and spindle hole, and inner cam latch.
- 1. Keypad Module: Consisting of “zero thru nine” buttons, mechanical override key, multi-function LED light display, extended handle length, and three screw holes for attachment to locker door panel.
 - a. Finish, Powder Coat: **[Black] [White] [Silver]** or **[Custom color as selected by Architect]**.
 - b. Material: Zinc alloy.
 - c. Size: 1-7/16 inch (37 mm) wide by 5-3/8 inch (136 mm) long and 1-1/8 inch (28.7 mm) deep at bottom end and 7/8 inch (23 mm) deep at top end.
 - 1) Extended Handle Length: 2-11/16 inch (68 mm) from spindle centerline to end of handle.
 - d. Spindle: **[13/16 inch (20 mm)]** or **[15/16 inch (24 mm)]** long, 5/8 inch (16 mm) diameter.
 - e. Mounting Screws: Pan-head machine screws (M4), 3/16 inch (4.5 mm) diameter holes, use upper screw located behind logo button, and use one or both of the other two screws to mount lock.
 - 1) Provide screw length to suit door thickness.
 - f. Mounting Configuration: **[Standard vertical] [Left hand horizontal]** or **[Right hand horizontal]**.
 - g. Cam: Attached to square shaft at end of spindle with M4 screw and domed washer, provide cam type to suit locker door and frame.
 - h. Logo: **[Standard]** or **[Customized logo as indicated on Shop Drawings]**.

AUTHOR
FILE NAME

LOCKER DOORS MULTI-FUNCTION DIGITAL LOCKS
10 5113.15 - 3

PROJECT NO.:
DATE:

PROJECT NAME
PROJECT LOCATION

2. Power Supply: Includes two AA (1.5 volt) batteries.
 - a. Battery level indicated by pressing “Logo” button twice, refer to battery condition indicator details on manufacturer’s programming instructions for additional information.
3. Digital Locking Features:
 - a. Pre-program digital combination locks for **[daily use in public mode]** or **[permanent assignment in private mode]**.
 - 1) Mode setting may be changed at any time by site manager.
 - b. Pre-program digital combination locks for specific **[user code]** and/or **[master code]**.
 - 1) User Code: Four (4) digits long, used to open and close lock.
 - 2) Sub-Master Code: Six (6) digits long.
 - 3) Master Code: Eight (8) digits long, used by site manager.
 - c. Provide automatic timed unlock option.
 - d. Provide **[standard]** or **[custom]** mechanical override key.
 - 1) Ensures locker can be opened in event of emergency.
 - 2) Allows for access without losing current User’s code.
 - e. Five multi-function light emitting diodes (LED) on the keypad module flash either “green” or “red” depending on function being displayed, refer to manufacturer’s programming instructions for additional details.
- E. Radio Frequency Identification (RFID) Digital Combination Lock, **Product ID 3783 RFID**: Outer module design that mounts onto outside of locker door with three screw holes and spindle hole, and inner cam latch.
 1. Keypad Module: Consisting of mechanical override key, multi-function LED light display, and three screw holes for attachment to locker door panel.
 - a. Finish, Powder Coat: **[Black]** **[White]** **[Silver]** or **[Custom color as selected by Architect]**.
 - b. Material: Zinc alloy.
 - c. Size: 1-7/16 inch (37 mm) wide by 5-3/8 inch (136 mm) long and 1-1/16 inch (27 mm) deep at bottom end and 7/8 inch (23 mm) deep at top end, with 1-3/16 inch (30 mm) overall depth.
 - d. Spindle: **[13/16 inch (20 mm)]** or **[15/16 inch (24 mm)]** long, 5/8 inch (16 mm) diameter.
 - e. Mounting Screws: Pan-head machine screws (M4), 3/16 inch (4.5 mm) diameter holes, use upper screw located behind logo button, and use one or both of the other two screws to mount lock.
 - 1) Provide screw length to suit door thickness.
 - f. Mounting Configuration: **[Standard vertical]** **[Left hand horizontal]** or **[Right hand horizontal]**.
 - g. Cam: Attached to square shaft at end of spindle with M4 screw and domed washer, provide cam type to suit locker door and frame.
 - h. Logo: **[Standard]** or **[Customized logo as indicated on Shop Drawings]**.
 2. Power Supply: Includes two AA (1.5 volt) batteries.
 - a. Battery level indicated by pressing “Logo” button twice, refer to battery condition indicator details on manufacturer’s programming instructions for additional information.
 3. Digital Locking Features:
 - a. Pre-program digital combination locks for **[daily use in public mode]** or **[permanent assignment in private mode]** with **[Radio Frequency Identification (RFID)]** or **[Near Field Communication (NFC)]** based digital cards.
 - 1) Mode setting may be changed at any time by site manager.
 - b. Pre-program digital combination locks for specific **[user code card]** and/or **[master code card]**.
 - 1) Read Speed Mode: **[High speed]** **[Standard]** or **[Eco]**.
 - 2) Programming: Refer to manufacturer’s written programming instructions for additional information.
 - c. Provide automatic timed unlock option.
 - d. Provide **[standard]** or **[custom]** mechanical override key.
 - 1) Ensures locker can be opened in event of emergency.
 - 2) Allows for access without losing current User’s code.
 - e. Five multi-function light emitting diodes (LED) on the keypad module flash either “green” or “red” depending on function being displayed, refer to manufacturer’s programming instructions for additional details.
 - F. Flush Fit Digital Combination Lock, **Product ID 3784 Flush Fit**: Outer module flush design that perimeter rim mounts onto outside of locker door with three different inner modules, depending on door thickness, that mounts on inside of door onto outer module with spindle and cam latch.

AUTHOR
FILE NAME

LOCKER DOORS MULTI-FUNCTION DIGITAL LOCKS
10 5113.15 - 4

PROJECT NO.:
DATE:

PROJECT NAME
PROJECT LOCATION

1. Keypad Module: Consisting of “zero thru nine” buttons, mechanical override key, multi-function LED light display, and two screw holes for attachment to inner module clamping to door panel through opening.
 - a. Finish, Powder Coat: **[Black] [White] [Silver] or [Custom color as selected by Architect]**.
 - b. Material: Zinc alloy.
 - c. Outer Module Size: 1-5/8 inch (41 mm) wide by 5-5/8 inch (1435 mm) long and 7/16 inch (11.5 mm) deep at bottom end and 1/4 inch (6.5 mm) deep at top end.
 - d. Inner Module Clamp For **[1/16 inch (1 mm) to 5/16 inch (8 mm) Thick Door Panel]**: 1-11/16 inch (42.6 mm) wide by 5-9/16 inch (141.6 mm) long by 5/8 inch (16 mm) thick; Clamp Box Part No. 9226512.
 - e. Inner Module Clamp For **[3/8 inch (9 mm) to 5/8 inch (16 mm) Thick Door Panel]**: 1-11/16 inch (42.6 mm) wide by 5-9/16 inch (141.6 mm) long by 5/16 inch (8 mm) thick; Clamp Box Part No. 9226511.
 - f. Inner Module Clamp For **[11/16 inch (17 mm) to 1-3/16 inch (30 mm) Thick Door Panel]**: 1-11/16 inch (42.6 mm) wide by 5-9/16 inch (141.6 mm) long by 1/8 inch (3 mm) thick; Clamp Box Part No. 9226510.
 - g. Spindle: **[13/16 inch (20 mm)] or [15/16 inch (24 mm)]** long, 5/8 inch (16 mm) diameter.
 - h. Mounting Screws: Two pan-head machine screws (M4), 3/16 inch (4.5 mm) diameter, length dependent on door thickness.
 - i. Mounting Configuration: **[Standard vertical] [Left hand horizontal] or [Right hand horizontal]**.
 - j. Cam: Attached to square shaft at end of spindle with M4 screw and domed washer, provide cam type to suit locker door and frame.
 - k. Logo: **[Standard] or [Customized logo as indicated on Shop Drawings]**.
 2. Power Supply: Includes two AA (1.5 volt) batteries.
 - a. Battery level indicated by pressing “Logo” button twice, refer to battery condition indicator details on manufacturer’s programming instructions for additional information.
 3. Digital Locking Features:
 - a. Pre-program digital combination locks for **[daily use in public mode] or [permanent assignment in private mode]**.
 - 1) Mode setting may be changed at any time by site manager.
 - b. Pre-program digital combination locks for specific **[user code]** and/or **[master code]**.
 - 1) User Code: Four (4) digits long, used to open and close lock.
 - 2) Sub-Master Code: Six (6) digits long.
 - 3) Master Code: Eight (8) digits long, used by site manager.
 - c. Provide automatic timed unlock option.
 - d. Provide **[standard] or [custom]** mechanical override key.
 - 1) Ensures locker can be opened in event of emergency.
 - 2) Allows for access without losing current User’s code.
 - e. Five multi-function light emitting diodes (LED) on the keypad module flash either “green” or “red” depending on function being displayed, refer to manufacturer’s programming instructions for additional details.
- G. Locker door swing direction is based on hinged right side with latch on left side facing locker.
- H. Lockers: Refer to Section 10 5100.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that lockers are in correct position and configuration.
- B. Verify upon receiving materials on the project site that they are undamaged and that delivery is complete including accessories and necessary documentation.
 1. Do not begin installation of these materials if damage to materials is suspected, contact manufacturer for further instructions.

3.02 INSTALLATION

- A. Install locks in accordance with manufacturer’s written installation instructions.
- B. Do not remove or replace the protective covers of products and materials.

AUTHOR
FILE NAME

LOCKER DOORS MULTI-FUNCTION DIGITAL LOCKS
10 5113.15 - 5

PROJECT NO.:
DATE:

PROJECT NAME
PROJECT LOCATION

- C. Coordinate position of lock to locker body and engagement of door lifter mechanism to ensure proper operation of latching mechanism.
- D. Coordinate lock installation in accordance with right handed swing of locker doors only.
- E. Test lock with locker door open to verify proper operation.

END OF SECTION