



The Encore™ Operator from Truth Hardware – style and versatility all in one brand new package. Truth Hardware, the name synonymous with quality, reliability and innovation has once again proven why we are the leaders in the industry. The Encore family of operators, with all its features and benefits is arguably the industry’s best value in window hardware.

Engineered to incorporate all of the strength and performance characteristics of Truth’s Maxim® Series of operators, the Encore has been created to take window manufacturers to a level of differentiation that they have been searching for. Manufacturers will also appreciate the cost savings they will realize through standardization of operators and manufacturing efficiencies.

The Encore, from Truth Hardware, the beginning of a whole new show!

FULL-FLIP FOLDING HANDLE

- The new Encore folding handle offers a smoother, more contemporary, integrated look when nesting in the operator cover.
- This system is uniquely designed to prevent handle collapse during operation.
- The streamlined design allows for easy screen release without removing the crank handle.
- Interference with window treatments such as curtains and blinds is also greatly reduced.

REMOVABLE “SNAP-FIT” COVER

The removable cover design has numerous advantages to the manufacturer and the homeowner alike.

- The window manufacturer will notice the reduced inventory costs by allowing non-color specific operators to be stocked.
- An integrated snap-fit feature allows fastenerless cover attachment offering the product a cleaner look, and removes easily for painting and staining of the window.
- This product opens the door to additional cover and handle design possibilities that will soon be available.
- The manufacturer can also take advantage of the possibility for unique cover designs to help them personalize and differentiate their window line.



Encore™ Dual Arm Operator with Tango™ Series Handle & Cover option shown



- Plated finishes are less expensive and more durable.
- Installation of both the cover and handle after the home is completed helps eliminate damage during construction.

SMALLER SEALABLE HOUSING/GASKET

Designed to drop in the same location as Truth’s Maxim System, the Encore Operator’s streamlined design helps:

- Reduce water/air infiltration and eliminates need for caulking.
- Minimize mounting surface damage in punching or routing of operator cut-out.
- Create a more stable mounting surface and improves seal endurance with its overlapping lip design.
- Enclosed gear train keeps dirt and construction debris out of the operator for smoother operation and longer life.

STANDARDIZATION OF PRODUCT & PROCESSES

- Allows manufacturer to use same operator mounting location on every window size whether it be a small window with a dyad operator or a

larger window with a dual arm, thus helping to reduce manufacturing and inventory costs.

- Dual arm is specially designed to support both washability and egress applications while mounted in a consistent location.

- Brackets and track have been standardized and include features designed to reduce installation time.

ENCORE IS BASED ON MAXIM MECHANICALS

- 33% less effort to operate than EntryGard style operators
- Provides “Maxim-size” large window operation
- Allows larger applications to meet ADA requirements
- Certified to meet AAMA 901-07 cycle test at commercial rating
- Based on application, the Maxim and Encore systems provide reduced sash play - thus reducing the tendency of the window to “walk” in buffeting wind conditions when compared to EntryGard® and similar style operators.
- Time proven design.

LOW PROFILE AND REAR MOUNT OPERATOR STYLES AVAILABLE

Designed to fit a wider range of profiles and window types, Truth's Encore Operators design options greatly increase the mounting stability of the system.

While sill mounting is standard, dual-axis mounting (sill and rear mounting in same operator) is available on certain models for companies manufacturing both wood & vinyl windows. Other benefits include:

- Easily mounts to thin wall profiles such as fiberglass, aluminum, and steel
- Increases gasket compression resulting in enhanced water and air tightness on rear mount.

PRODUCT APPLICATION ASSISTANCE:

Truth Hardware has prepared a matrix based on AAMA 101 Load Tests which will help you choose the best hardware for your window requirements. *The sizes and weights which Truth recommends throughout this catalog section are based upon "typical" mounting locations as outlined in the matrix on page 40hh.*

If you are designing a new window profile, or are having difficulty selecting hardware for your window, please contact Truth. Our highly trained Technical Service Staff can assist you with the selection of the appropriate hardware to meet your performance requirements, as well as providing personalized application drawings.

LOGO OPTIONS:

Have you considered personalizing your window? Contact Truth for further details on how you can add your own "signature" to the Encore handle and cover.

WARRANTY: Protected under the terms of the "Truth Warranty for Window & Door Manufacturers & Authorized Distributors". Refer to Truth's Terms & Conditions for further details.

MATERIAL:

High-pressure die-cast zinc operator housing, crank handle and knob. Hardened steel drive worm and gear. High-quality plastic operator cover. 300 series stainless steel packages are available for most models.

CORROSION RESISTANCE:

Truth's E-Gard® Hardware has a multi-stage coating process that produces a superior physical and aesthetic finish. Plus, it is resistant to a wider range of corrosive materials, including industrial cleaning materials and environmental pollutants. This proprietary process has been tested to be approximately three times better than common zinc plated finishes. For coastal applications, Truth also has stainless steel packages available (see Tech Note #7).

FINISH:

Electrostatically applied, durable coatings in combination with our high quality molded plastic cover provide excellent resistance to chipping, scratching and corrosion while maintaining color stability for years in direct sunlight. Please refer to Truth's Color Chart for examples of Truth's most popular finish options. Truth also offers a wide range of decorative "plated" finishes – contact Truth for additional information on availability of these finishes on specific product lines (see Truth Tip #9).

RECOMMENDED SCREWS:

All Encore Operator components have been designed to use the same standardized screw style and size, please refer to the drawings for further details. Coating compatibility between the screws and the operator components is very important in order to optimize the corrosion resistance performance. Refer to drawings for complete information on screw type and quantity needed (sold separately). For additional information regarding screw selection - see Truth Tips and Tech Note #11.

TRUTH TIPS:

1. Operator base handing is determined by the window hinge side when viewed from the outside.
2. Handing of Encore Handle and cover is determined by the direction the handle points when in the nested position.
3. Encore's unique spline design will only accept Tango or Encore specific handle designs.
4. For accurate hardware placement, pre-drilling of the screw holes in the window profile is recommended.

5. For PVC and composite window applications, mounting screws should pass through two profile walls, or one wall and one insert wall. For this reason, it may be necessary to use a longer screw than is recommended.

6. For metal window profiles, Truth recommends machine screws. However, in most applications, sheet metal screws will provide adequate holding power.

7. Rear mount back plate #21969.92 is designed for use on profiles up to .25" (6.35mm) thick. Contact Truth regarding back plates for thicker applications.

8. When operator is installed in high-rise applications over two stories, a Truth Limit Device, to restrict the amount of opening, is recommended. Contact Truth for wind load information.

9. A Spline Cap (#21306) is available to protect the operator splines from dirt and other windows from damage during shipping, installation, and final building construction.

10. Truth recommends that Snubbers be used on the hinge side on any casement window that has a tendency to bow outwardly at the center in the closed position. Adding Snubbers may increase the negative air pressure rating of a casement window.

11. Decorative plated finishes are not recommended for coastal or highly corrosive environments.

INCLUDE TRUTH SPECS ON YOUR NEXT WINDOW PROJECT

Window operators shall be provided which allow easy adjustment of window position. The mechanism should be crank operated.

Window operators will have removable cover with folding handle that nests in the operator cover when retracted. The operator must be constructed of E-Gard® coated components. High-pressure die-cast zinc operator base, crank handle and knob. Hardened steel drive worm and gear. High-strength plastic operator cover.

Window Operators shall be Encore™ Series Operators as manufactured by Truth Hardware, Owatonna, MN.



ENCORE™ DUAL ARM OPERATOR

Drawings begin on pg. 26d

- Provides for egress or washability with the same operator in the same location thereby minimizing sill cover inventory.
- Operates sash sizes up to 24" to 40" wide, and 84" high and weighing up to 108 lbs. No need to change operators for standard and custom-sized windows.
- Encore Dual Arm provides over 7" of washability with the standard Maxim® 13" hinge and is compatible with Truth's standard 10" hinge, with reduced washability.
- Encore Dual Arm and Dyad Operators share standardized bracket and mounting location reducing inventory and manufacturing complexities.

ORDERING INFORMATION:

1. Specify "standard" or "coastal" package.
 2. Order item number:
#50.10 or
#50.11 (low profile) or
#50.12 (rear-mount)
 3. Specify finish number.
 4. Specify right- or left-hand (determined by the side the hinge is on when viewed from the outside).
 5. Select mounting hardware (sold separately).
#12510.XX LH Bracket
#12511.XX – RH Bracket, or
#11661.XX – LH Bracket (low profile)
#11662.XX – RH Bracket (low profile)
- NOTE:** Handing of Brackets does not necessarily match handing of Operator

– refer to table within application drawing page, or contact Truth's Technical Service Department for further information.

Optional brackets for unique profile applications are available – see Truth's Stud Bracket & Track section, or contact Truth Hardware for further details.

- #11576.XX – Track & Slider, or
- #32384.92 – Low profile track

Tango™ Style Cover & Handle pack (handed*)

- #12614.XX – Left-hand
- #12616.XX – Right-hand

***NOTE:** Handle & cover handing is determined by direction the handle points in the nested position.

Optional accessories:

- #32658 – Gasket
- #31883 – Gasket Applicator
- #21969.92 – Backplate (required for Rear mount options)
- #21306 – Protective red plastic spline cap.



ENCORE™ DYAD OPERATOR

Drawings begin on pg. 26l

- Designed for narrow windows, but will operate a frame width from 16" to 32", and up to 72" high and a sash weight of 55 lbs.
- Fits in all profiles currently using the EntryGard® or Maxim® Dyad operators.
- Encore Dyad provides over 7" of washability with the standard Maxim® 13" hinge and is compatible with Truth's standard 10" hinge, with reduced washability.
- Provides over 7" of washability with standard Maxim® Hinge.

ORDERING INFORMATION:

1. Specify "standard" or "coastal" package.
2. Order item number:
#50.60 or
#50.61 (low profile) or
#50.62 (rear-mount)
3. Specify finish number.
4. specify right- or left-hand (determined by the side the hinge is on when viewed from the outside).
5. Select mounting hardware (sold separately).
#12510.XX – LH Bracket
#12511.XX – RH Bracket, or
#11661.XX – LH Bracket (low profile)
#11662.XX – RH Bracket (low profile)

NOTE: Handing of Brackets does not necessarily match handing of Operator – refer to table within application drawing page, or contact Truth's Technical Service Department for further information.

Optional brackets for unique profile applications are available – see Truth's Stud Bracket & Track section, or contact Truth Hardware for further details.

Tango™ Style Cover & Handle pack (handed*)

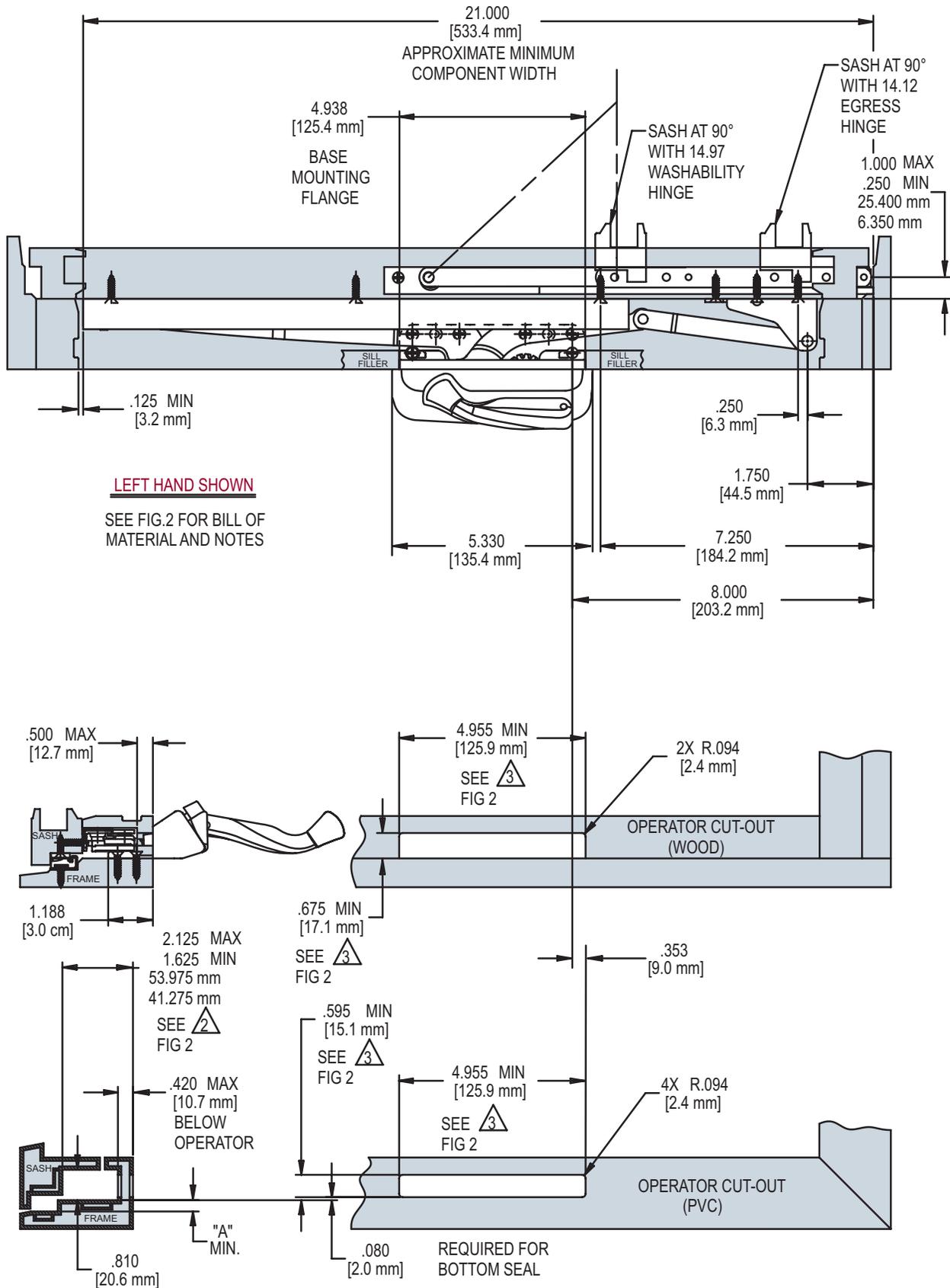
- #12614.XX – Left-hand
- #12616.XX – Right-hand

***NOTE:** Handle & cover handing is determined by direction the handle points in the nested position.

Optional accessories:

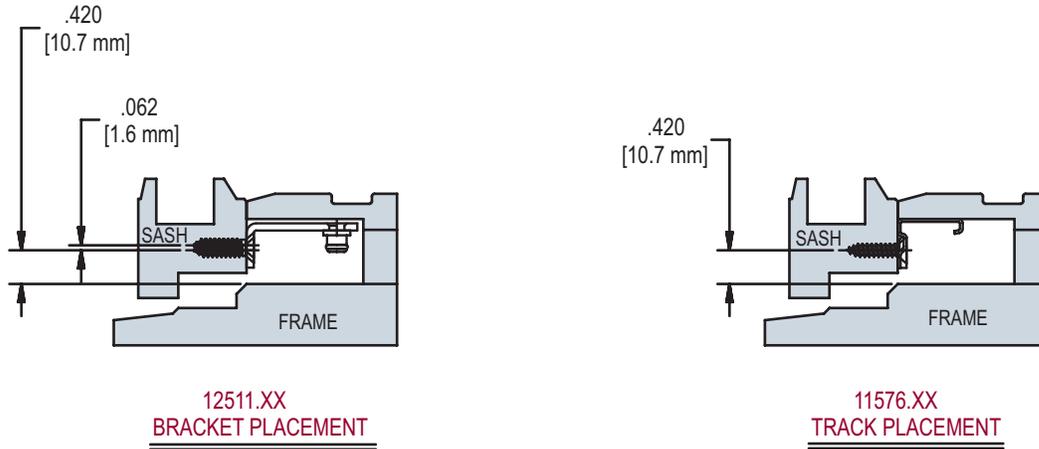
- #32658 – Gasket
- #31883 – Gasket Applicator
- #21969.92 – Backplate (required for Rear mount options)
- #21306 – Protective red plastic spline cap.

FIG. 1 APPLICATION OF ENCORE DUAL ARM OPERATOR (SILL MOUNT VERSION)



ENCORE™ DUAL ARM OPERATOR (SILL MOUNT)

FIG. 2 APPLICATION OF ENCORE DUAL ARM OPERATOR CONTINUED (SILL MOUNT VERSION)



HARDWARE SHOWN FOR LEFT HAND WINDOW, SEE FIG.1

PART NUMBER	DESCRIPTION
50.10.00.011	DUAL ARM OPERATOR
12511.XX	STUD BRACKET
11576.XX	TRACK ASSEMBLY
14.97.00.XXX	WASHABILITY HINGE
12614.XX	TANGO HANDLE/COVER PACK
32658	GASKET (PVC)

HINGE	"A"
14.97.00.XXX	.300 [7.6 mm]
14.12.00.XXX	
OTHER 14 SERIES CASEMENT HINGES	.250 [6.4 mm]

NOTES:

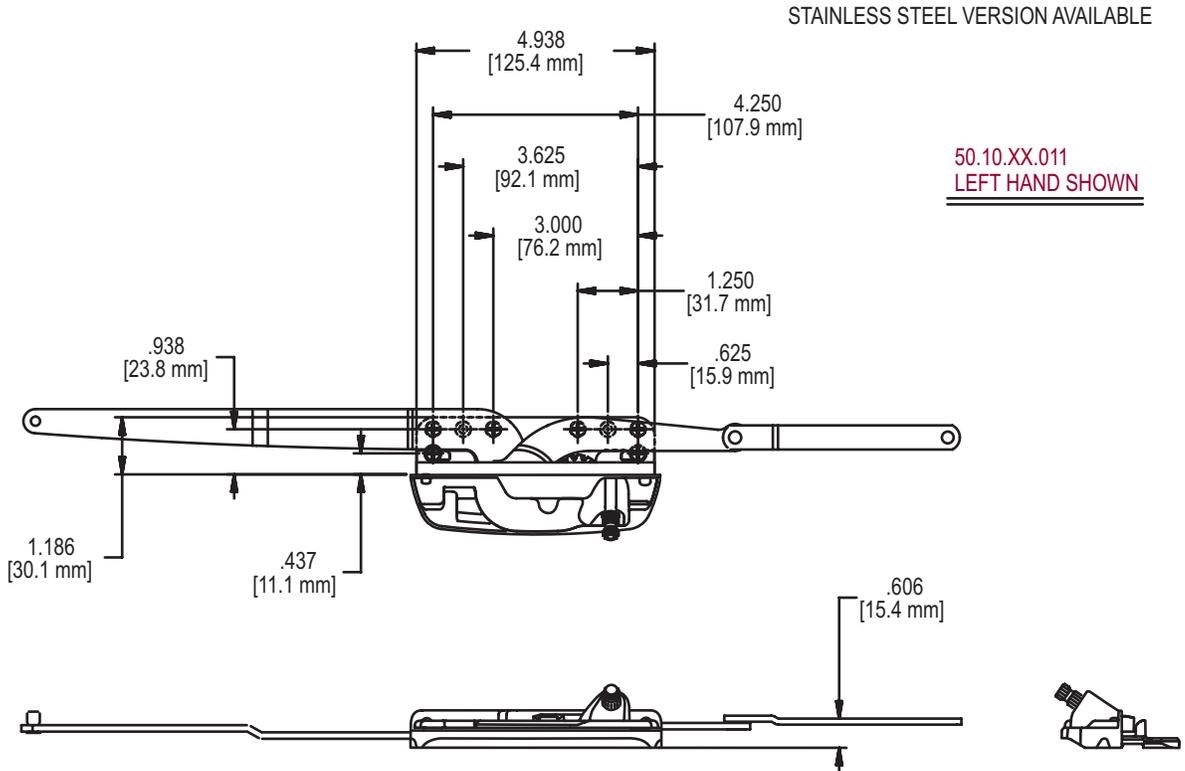
1. STUD BRACKET 12510.XX AND 12511.XX REQUIRES THE SAME MOUNTING LOCATION FOR BOTH THE ENCORE DUAL ARM OPERATOR AND THE ENCORE DYAD OPERATOR.

2. STUD BRACKET 12510.XX AND 12511.XX MAY NOT FIT IF 2.125/1.625 DIMENSION IS LESS THAN 1.875. CONTACT TRUTH FOR RECOMMENDATIONS.

3. HOLD THIS DIMENSION AS CLOSE TO THE MINIMUM AS MANUFACTURING TOLERANCES ALLOW. A CLOSE FITTING CUT-OUT HELPS TO STABILIZE THE OPERATOR AGAINST ROCKING

4. GASKET 32658 IS REQUIRED ON PVC AND METAL PROFILES FOR AN IMPROVED AIR AND WATER SEAL

FIG. 3 ENCORE DUAL ARM OPERATOR (SILL MOUNT VERSION)

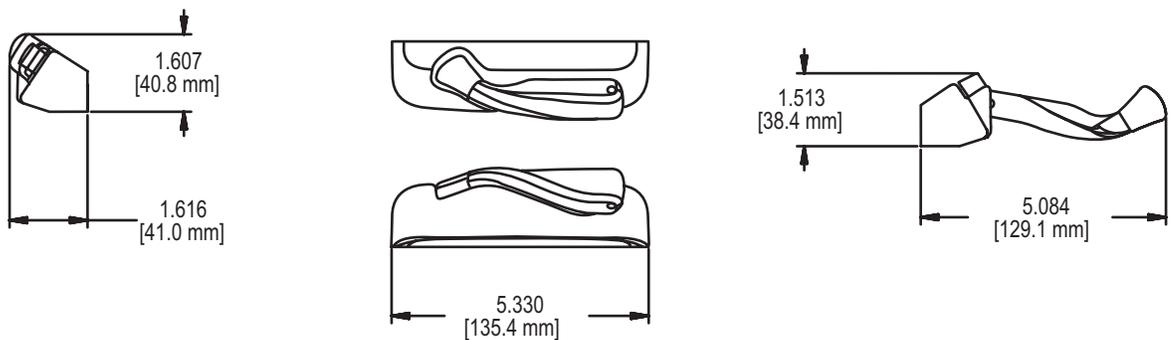


RECOMMENDED SCREWS:

(QTY 6)(PN 19240.XX)#8 X 1 FLAT HEAD SHEET METAL SCREW (SEE TRUTH TIPS FOR MORE INFORMATION)

(QTY 2)FOR REAR MOUNT:#8-32 X 3/8 PAN HEAD MACHINE SCREW PN 19545.XX

FIG. 4 ENCORE TANGO HANDLE/COVER 12614.XX(LH) (SHOWN), 12616.XX(RH)



ENCORE™ DUAL ARM OPERATOR (SILL MOUNT)

FIG. 5 BACK PLATE 21969.92

FOR USE WITH
51.12 REAR MOUNT
VERSION ONLY

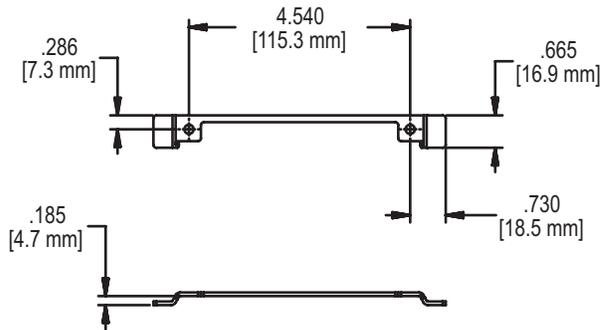
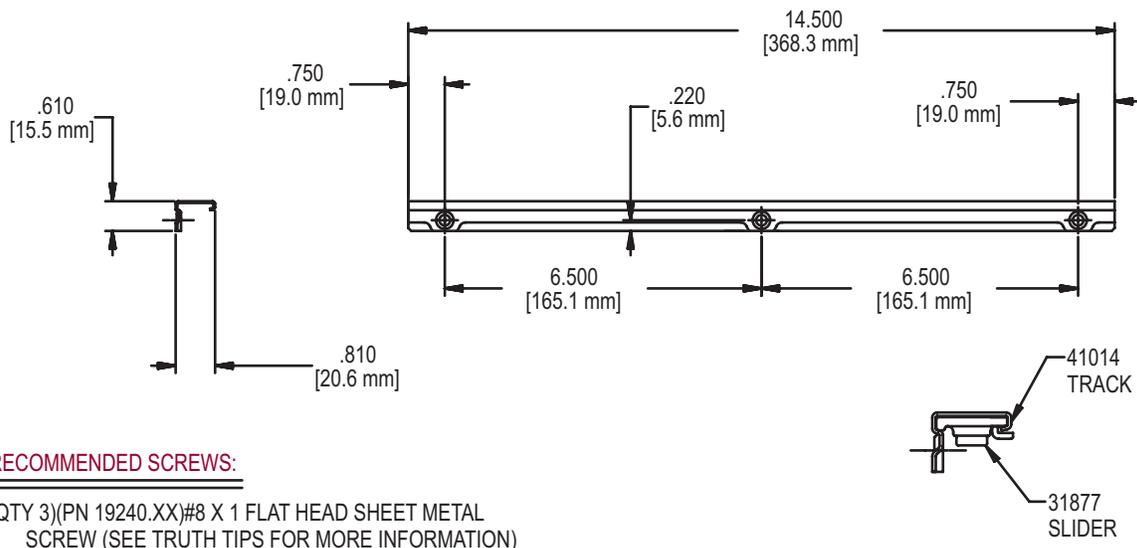


FIG. 6 TRACK & SLIDER ASSEMBLY 11576.XX

STAINLESS STEEL VERSION AVAILABLE



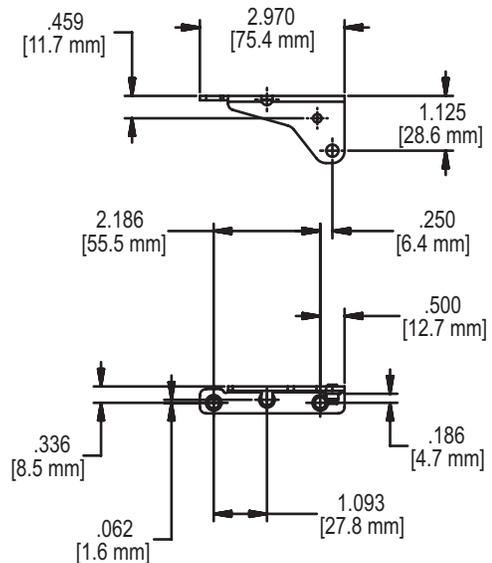
RECOMMENDED SCREWS:

(QTY 3)(PN 19240.XX)#8 X 1 FLAT HEAD SHEET METAL
SCREW (SEE TRUTH TIPS FOR MORE INFORMATION)

FIG. 7 STUD BRACKET 12511.XX(LH) (SHOWN) 12510.XX(RH)

STAINLESS STEEL VERSION AVAILABLE

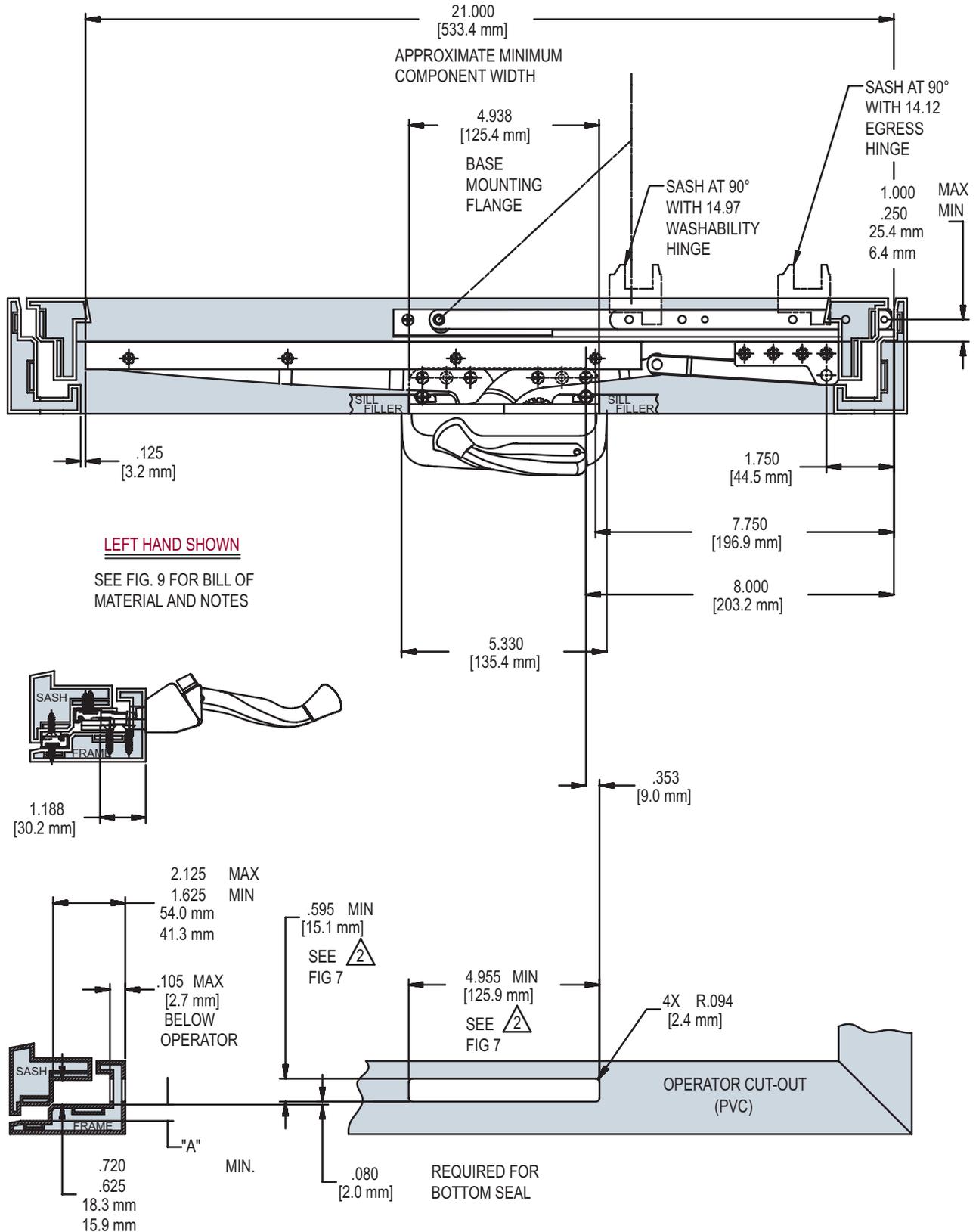
HAND OF BRACKET DOES NOT
NECESSARILY MATCH HAND
OF OPERATOR



RECOMMENDED SCREWS:

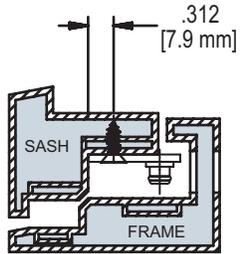
(QTY 3)(PN 19240.XX)#8 X 1 FLAT HEAD SHEET METAL
SCREW (SEE TRUTH TIPS FOR MORE INFORMATION)

FIG. 8 APPLICATION OF ENCORE DUAL ARM OPERATOR (SILL MOUNT VERSION) (LOW PROFILE)

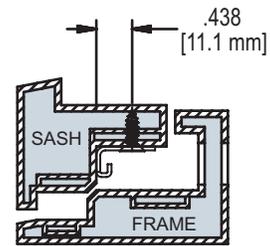


ENCORE™ DUAL ARM OPERATOR (LOW PROFILE)

FIG. 9 APPLICATION OF ENCORE DUAL ARM OPERATOR CONTINUED
(SILL MOUNT VERSION)
(LOW PROFILE)



11661.XX
BRACKET PLACEMENT



32384.XX
TRACK PLACEMENT

HARDWARE SHOWN FOR LEFT HAND WINDOW, SEE FIG.8	
PART NUMBER	DESCRIPTION
50.11.00.011	DUAL ARM OPERATOR
11661.XX	STUD BRACKET
32384.XX	TRACK
14.97.00.XXX	WASHABILITY HINGE
12614.XX	TANGO HANDLE/COVER PACK
32658	GASKET (PVC)

HINGE	"A"
14.97.00.XXX 14.12.00.XXX	.422 [10.7 mm]
OTHER 14 SERIES CASEMENT HINGES	.375 [9.5 mm]

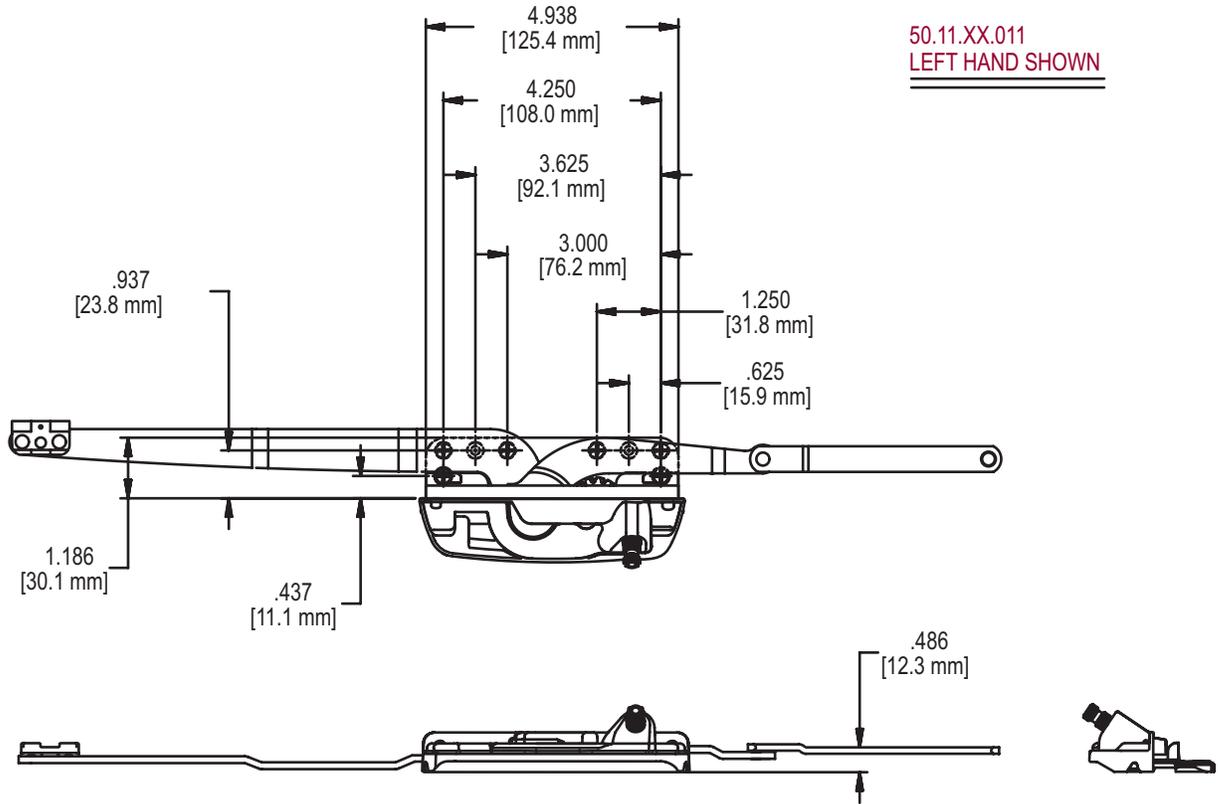
NOTES:

1. STUD BRACKET 11661.XX AND 11662.XX WILL BE PLACED IN THE SAME LOCATION FOR BOTH THE ENCORE DUAL ARM OPERATOR AND THE ENCORE DYAD OPERATOR.

2. HOLD THIS DIMENSION AS CLOSE TO THE MINIMUM AS MANUFACTURING TOLERANCES ALLOW. A CLOSE FITTING CUT-OUT HELPS TO STABILIZE THE OPERATOR AGAINST ROCKING.

3. GASKET 32658 IS REQUIRED ON PVC AND METAL PROFILES FOR AN IMPROVED AIR AND WATER SEAL

FIG. 10 ENCORE DUAL ARM OPERATOR (SILL MOUNT VERSION) (LOW PROFILE)



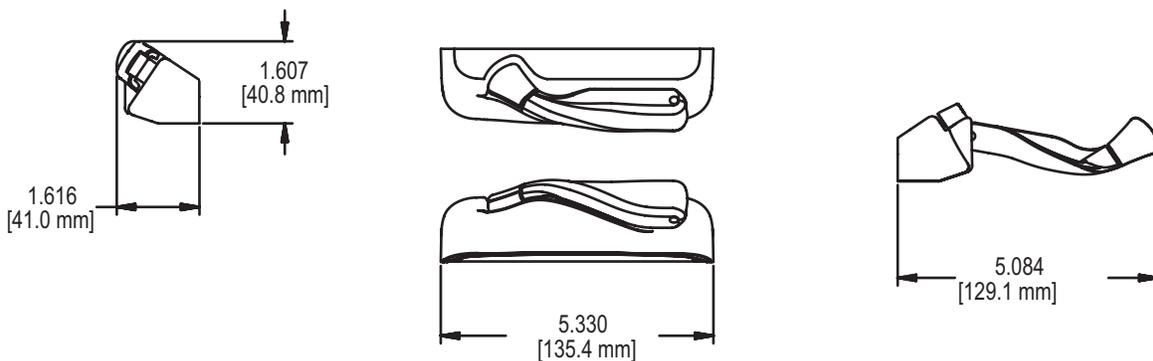
50.11.XX.011
LEFT HAND SHOWN

RECOMMENDED SCREWS:

(QTY 6)(PN 19240.XX) #8 X 1 FLAT HEAD SHEET METAL SCREWS (SEE TRUTH TIPS FOR MORE INFORMATION)

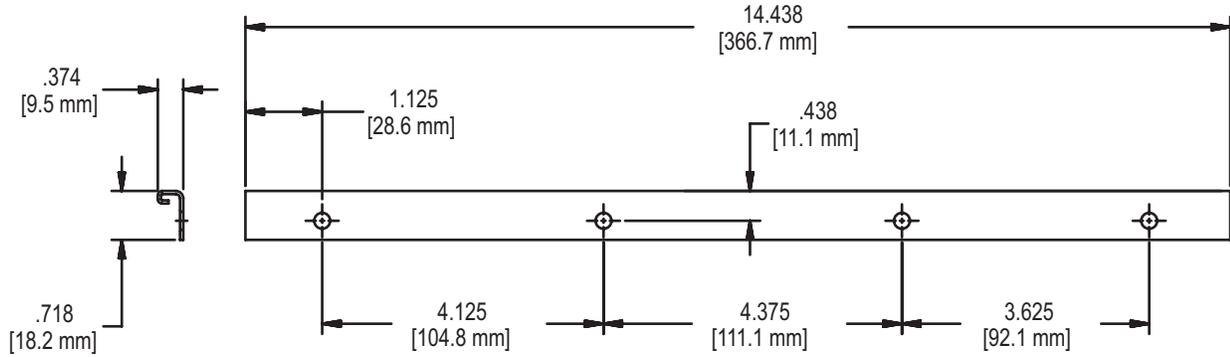
(QTY 2)REAR MOUNT:#8-32 X 3/8 PAN HEAD MACHINE SCREW PN 19545.XX

FIG. 11 ENCORE TANGO HANDLE/COVER 12614.XX(LH) (SHOWN), 12616.XX (RH)



ENCORE™ DUAL ARM OPERATOR (LOW PROFILE)

FIG. 12 TRACK 32384.XX

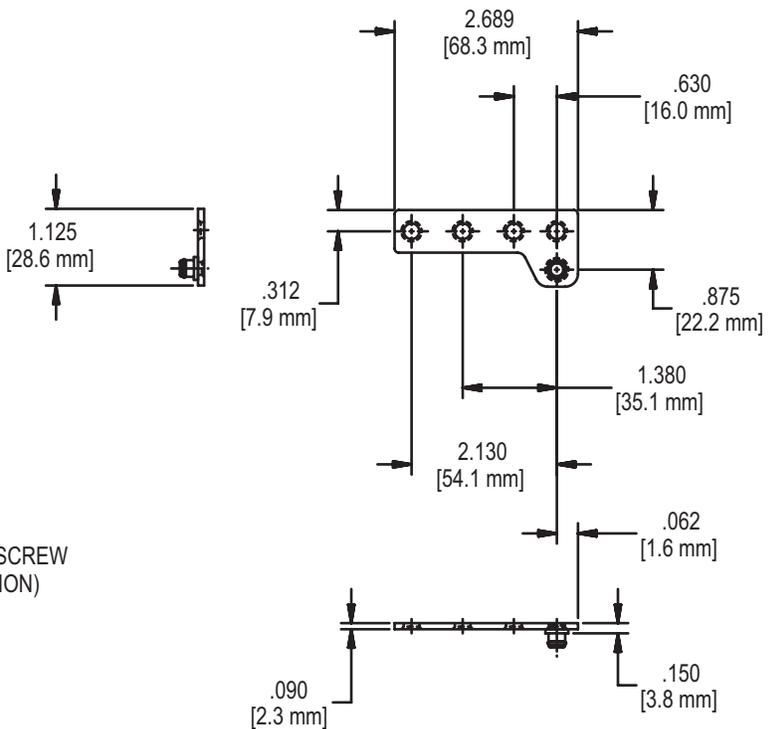


RECOMMENDED SCREWS:

(QTY 4)(PN 19070.XX) #7 X 1/2 FLAT HEAD UNDERCUT SHEET METAL SCREW (SEE TRUTH TIPS FOR MORE INFORMATION)

FIG. 13 STUD BRACKET 11661.XX(LH) (SHOWN) 11662.XX(RH)

HAND OF BRACKET DOES NOT NECESSARILY MATCH HAND OF OPERATOR



RECOMMENDED SCREWS:

(QTY 4)(PN 19205.XX)#8 X 1/2 SHEET METAL SCREW (SEE TRUTH TIPS FOR MORE INFORMATION)



ENCORE™ REVERSE DYAD OPERATOR

Drawings begin on pg. 26r

- Uniquely designed for narrow windows and specialty windows like round tops, half round, trapezoid, garden, octagon and windows that require Butt Hinges.
- Will work on frame widths down to a minimum of 12" depending upon the thickness of the frame.
- Uses a non-handed bracket which will help reduce inventory issues.

ORDERING INFORMATION:

1. Specify "standard" or "coastal" package.
2. Order item number:
#50.80 or
#50.81 (low profile) or
#50.82 (rear-mount)
3. Specify finish number.
4. Specify right- or left-hand (determined by the side the hinge is on when viewed from the outside).
5. Select mounting hardware (sold separately).

#11674.XX – Non-Handed Bracket
Optional brackets for unique profile applications are available – see Truth's Stud Bracket & Track section, or contact Truth Hardware for further details.

Tango™ Style Cover & Handle pack (handed*)

- #12614.XX** – Left-hand
- #12616.XX** – Right-hand

***NOTE:** Handle & cover handing is determined by direction the handle points in the nested position.

Optional accessories:

- #32658** – Gasket
- #31883** – Gasket Applicator
- #21969.92** – Backplate (required for Rear mount options)
- #21306** – Protective red plastic spline cap.



ENCORE™ SINGLE ARM OPERATOR

Drawings begin on pg. 26x

- Created for casements which are 20"-32" wide up to 72" high and with a 73lb. sash weight.
- Fits in all profiles currently using the EntryGard® or Maxim® Single Arm operators.

ORDERING INFORMATION:

1. Specify "standard" or "coastal" package.
2. Order item number:
#52.11 or
#52.13 (low profile)
Note: Rear-mount version available upon request.
3. Specify finish number.
4. Specify right- or left-hand (determined by the side the hinge is on when viewed from the outside).
5. Select mounting hardware (sold separately).

- #11576.XX** – Track & Slider, or
- #30175** – Low profile track

Tango™ Style Cover & Handle pack (handed*)

- #12614.XX** – Left-hand
- #12616.XX** – Right-hand

***NOTE:** Handle & cover handing is determined by direction the handle points in the nested position.

Optional accessories:

- #32658** – Gasket
- #31883** – Gasket Applicator
- #21306** – Protective red plastic spline cap.



ENCORE™ AWNING OPERATORS

Drawings begin on pg. 26ee and 26hh

- Allows the manufacturer to offer the same look throughout the home on both casements and awnings.
- Will provide for maximum opening combined with wide "pull-in" connection to sash.
- Operates frame widths from 20" to 60", reducing inventory requirements for operator sizes.
- New narrow gauge version (#51.13) fits smaller cavity profiles and smaller window sizes.
- "Quick disconnect" feature on operator arms does not require tools.

ORDERING INFORMATION:

1. Specify "standard" or "coastal" package.
2. Order Operator item number:
#51.10 or
#51.12 (rear-mount) or
#51.11 (narrow awning)
3. Specify finish number.
4. Select mounting hardware (sold separately).

#11577.XX – Track and Pivot Slides
Tango™ Style Cover & Handle pack (handed*)

- #12614.XX** – Left-hand

***NOTE:** Handle & cover handing is determined by direction the handle points in the nested position.

Optional accessories:

- #32658** – Gasket
- #31883** – Gasket Applicator
- #21969.92** – Backplate (required for Rear mount options)
- #21306** – Protective red plastic spline cap.