Introducing Truth's next generation of power window system...Sentry II HS® for heavy skylights. Based on the powerful and reliable mechanics from our previous SkySentry® motorization systems, we've added a new digital electronics package with built in power conversion to take this system to a whole new level of service and reliability.

The new electronics package provides many new features to enhance a homes comfort and its owner's peace of mind.

- Quick and easy installation of the skylight is possible when motor system is pre-installed and programmed by skylight manufacturer at their facility. The electrician needs only to connect line voltage power and the skylight is completely ready for operation no further set up would be required by the installer or homeowner!
- Power conversion built right into the skylight mounted control package which accepts direct connection of line voltages from 100 to 240 VAC at 47 to 440 Hz. No more transformers to complicate and add expense to the installation.
- Power Blind System compatible.
   Centralized window control is now possible with Sentry II's ability to accept and control most 24 VDC power blind systems. The Sentry II RF remote or wall switch controls both skylight and blind motors for convenient, centralized control.
- Power Protected Memory eliminates the need to "reset" or retrain the control system after a power outage. Once the installation is complete the motor never needs further service or adjustments even after prolonged power outages!
- RF remote compatibility built into all motor control packages as a standard feature. Simply order the optional remote to add new and exciting control capability for the homeowner.
- Rain Sensor, standard on all kits, automatically closes the skylight at the first sign of moisture. Corrosion resistant sensor decreases mechanisms cleaning requirements and extends service life.



- Easily adapts for new construction or retrofit applications. Please consult with your electrical contractor for a retrofit evaluation.
- ETL Listed and CE Approved.
   Meets all requirements for Class II installations.
- Safety Automatic Motor Reversal has been engineered into the system which is intended to reverse the motor should an obstruction stop the skylight while closing. In addition, a screen interlock is provided which, when properly installed, electrically disconnects the motor when the screen is removed. These features are intended to help prevent personal injury which could result from reaching into the skylight area during its operation.
- Synchronized Operation of multiple motors is now standard on the HS motor system. The same Sentry II HS motor system can now be used on single motor applications or it can be ganged with up to four motor units on a large single skylight. Multiple motors on a single skylight add stability and capacity.

- Awning Windows Can also be fitted with the Sentry II HS Motor System. Skylight hardware systems work great on awning windows with butt hinges.
- Building Automation systems can easily be tied into the control electronics for virtually limitless ventilation possibilities.

### **SENTRY II HS CAPACITY**

Truth's Sentry II HS for heavy skylights is load rated at 80 lbs. at the chain. This equates to a total skylight hatch weight of 160 lbs. Sentry II HS power skylight system is rated at 50 watts.

### **CONTROL OPTIONS**

The Sentry II HS motorization kit is available with a standard RF hand held remote for skylight control (order separately). The same remote can also accept and control most commercially available 24 VDC mini blinds (not provided by Truth Hardware). The motor unit provides feedback to the user via a status light (LED). This small LED shows when the motor is running, or if there are any problems during skylights operation. An optional wall control panel is also available.

### SENTRY II HS MOTOR SYSTEM

Up to 20 skylights can be controlled from a single control panel.

## REMOTE FEATURES INCLUDE:

- **Infinite Number** of windows & skylights can be controlled with a single remote.
- 9 Zones or "unit codes" are available to allow units to be controlled in up to nine groups and organized to a users needs.
- Motorized Blinds can be controlled with the same remote.
- Control windows and skylights from one remote the Sentry II HS (for heavy skylights) uses the same remote as the Sentry II WLS to allow coordinated ventilation throughout the entire home or building.
- Built in Thermostat allows skylights to open and close together, to help maintain a comfortable interior temperature. Take advantage of true "chimney effect" cooling to reduce energy demands.
- Rolling Code Technology proven in garage door openers is built into every remote to provide high security and peace of mind.

**WARRANTY:** The Sentry II family

of products is warranted for one year against defects in materials and workmanship on all electronic and mechanical components.

### **CONSUMER NOTICE:**

The Sentry II HS for heavy skylights must be installed by a qualified electrician.

# PRODUCT APPLICATION ASSISTANCE:

If you need assistance with product configurations to meet your needs, please visit our website at <a href="https://www.truth.com">www.truth.com</a>. Under the "Technical Support" tab you will find all of the technical information needed to properly configure and specify all elements of an automated window installation, including installation instructions, pre-wiring and proper hardware requirements. You can also contact Truth's highly trained Technical Service Staff who can assist you with the selection of the appropriate hardware. These

individuals are available during normal business hours (CST) at 800-324-4487.

### **ORDERING INFORMATION:**

Ordering of the new Sentry II HS systems is much easier than in the past. All hardware necessary for mounting on a skylight is now included in the same kit. Special Note: Motor covers are ordered separately to help keep your inventory costs down. Sentry II motor kit packaging includes additional space so cover can be added which allows the manufacturer to supply a complete kit to jobsite.

Sentry II HS for heavy skylights

Order 1 per skylight
43.50.00.005 - Sentry II HS
System

**12481.XX** - Cover (.xx denotes finish code)

Order 1 Hand Held Remote &/or Wall Switch

**43.53.00.002** - Hand Held RF Remote

**12539** - Wall Switch

<u>Finish Codes:</u> The "HS" cover is available in .01 Aluminum, .23 Chestnut Bronze, .24 Beige, & .32 White.

### TRUTH TIPS:

- 1. To help prevent personal injury from moving skylight parts, the skylight must be installed at least eight feet above the floor or an inside screen must be applied to the skylight with the provided screen interlock properly installed. Adherence to these safety requirements is the responsibility of the installer.
- 2. The Sentry II HS system is rated for use in indoor applications only.
- 3. When choosing between the non-synchronous or synchronous Sentry II HS motor system, consider the rigidity of the skylight panel. Since each motor system is designed to lift open and pull close at a single contact point, the skylight panel must be rigid enough in the closed position to ensure proper corner pull-in for a weather tight seal and rigid enough in the open position to provide proper skylight stability. The wider the skylight is, the more significant this issue can become. Therefore the rigidity of

some skylight sizes may make it necessary to use two or more synchronous motor systems even though the weight of the skylight may only require a single motor system. For more assistance, contact Truth Hardware Technical Services.

4. The Sentry II HS requires 1 amp of 120 VAC.

# INCLUDE TRUTH SPECS IN YOUR NEXT SKYLIGHT PROJECT

Skylight operating hardware should be suited for roof window, and skylight installation for wood, PVC, and metal materials. Skylight Bases shall be provided with a special high quality gear reduction (high output torque) to meet required maximum sash weight of 160 lbs. (72.6 kg.), unit to be constructed of high pressure zinc diecast case electrostatically painted. Each base

electrostatically painted. Each base is complete with steel chain, sprocket, and detachable sash bracket. The chain sprocket shall be hardened steel and an acetal chain guide must be provided. Base modules with a Motorized Drive shall be low profile in design. Unit to be available with snap-on, decorative ABS cover conveniently accessible to motor, mechanical, and electronic components. The mechanical closing pressure shall not exceed 70 lbs. Supply electronic circuitry for sensing rain and accommodation of remote control. Each unit shall be equipped with auxiliary contacts for additional thermostatic control, security, fire or smoke alarms, or computer control. The control system is to be supplied with standard line voltages from 100 to 240 VAC at 47 to 440 Hz (no transformer required). Motor kits to include motor, rain sensor, and hardware pack. Remote control shall operate at a minimum distance of 50 ft. from skylight operator. Power skylight system shall be "Sentry II HS" as manufactured by Truth Hardware, Owatonna, MN.

# FIG. 1 FINISHED DIMENSIONS OF THE SENTRY II HS MOTOR SYSTEM 17,985 [456.8 mm] C OF SKYLIGHT 2.575 [65.4 mm] 3.426 [87.0 mm]

### FIG. 2 SENTRY II HS MOUNTING ILLUSTRATION

SKYLIGHT FRAME

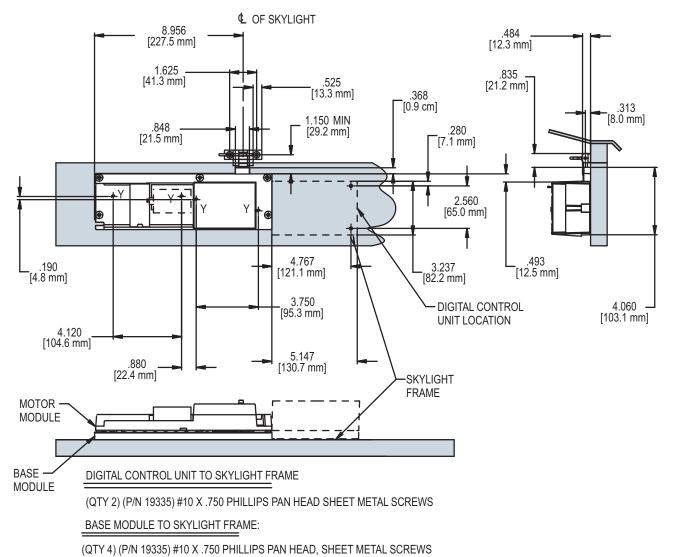


FIG. 3 SENTRY II HS PRE-WIRING DIAGRAM LOGO LED STATUS WINDOW **BUTTON** MOTOR COVER HIGH VOLTAGE (110 VAC) **ISOLATION** COVER ପ MOTOR DRIVE -DIGITAL CONTROL UNIT PRESS IN BASE -**STRAIN MODULE RELIEF** (SUPPLIED) CAT 5 WIRE UP TO SEE 110 VAC. SUPPLY 50 FEET-TERMINATE WITH NOTE 1 MOTOR RATING: **RJ45 CONNECTORS AT BOTH** 50 WATTS **ENDS (NOT SUPPLIED)** SKYLIGHT **BASE MODULE FRAME** 1.363 POSITION ON [34.6 mm] Ø1.00 SKYLIGHT [25.4 mm] **FRAME** 1.860 (SEE FIG. 1 FOR BASE [47.2 mm] MODULE POSITION) WALL MOUNTED **CONTROL PANEL** (OPTIONAL) 1.148 REQUIRES HORIZONTALLY MOUNTED [29.2 mm] Ø.500 FOR WALL SINGLE GANG RECEPTICAL BOX 7.907 MOUNTED CONTROL [200.8 mm] PANEL (OPTIONAL) NOTE: **₡** OF SKYLIGHT 1. FOR CONTROL OF MULTIPLE MOTOR UNITS FROM ONE WALL MOUNTED CONTROL PANEL, RUN A 2 CONDUCTOR WIRE BETWEEN EACH MOTOR UNIT. 22 GAGE OR HEAVIER IS SUFFICIENT.