



SKYFOLD[®]

dormakaba Group

OWNER'S MANUAL

CLASSIC[™] SERIES

ZENITH[®] SERIES

ZENITH[®] PREMIUM SERIES

MIRAGE[®]



TRADEMARKS

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* For simplicity, Skyfold's standard keyed & push button switches and Skyfold's optional touch screen operator stations (standard with Zenith Premium only) are often referred to as "switch(es)".

Congratulations on the purchase of your Skyfold wall system, the most technologically advanced and only vertically folding operable wall of its kind.

Before operating your Skyfold wall, read this manual carefully as it includes a description of the wall's major components, as well as procedures related to the operation of the wall, a maintenance schedule and explanations regarding the warranty.

Your Skyfold wall is a fully automatic operable wall that is activated by applying pressure to two (2) switches simultaneously. In addition to simplicity of operation, your Skyfold wall was designed with safety as a primary concern. This is reflected not only in the design philosophy of the system, but also in specific subsystems and components as listed below.

- The wall's movement is stopped instantly when:
 - Pressure is released from either switch;
 - A loss of power occurs;
 - A mechanical jamming occurs (upward direction only);
 - Excessive current is being drawn by the motor;
 - Pressure is applied on the obstruction sensor or when the infra-red sensor (Mirage) detects an obstruction. If the sensor is triggered, the wall will reverse automatically for three (3) seconds.
- If the downward wall speed becomes substantially higher than normal, a hydraulic checking device will lower the wall's speed.
- The cables used to lift and support your Skyfold wall(s) are of the highest strength and quality. In the unlikely event that a cable fails, the other cables will not be affected.
- The programmable logic controller cuts off power if a short circuit is detected on the 12V or 24V line or if polarity is reversed.
- The electrical control box contains the latest in overload protection (models >1hP) and other electrical safeguards.
- The interface between the gearbox and the line shaft ensures a high degree of safety.
- The movement of the wall is triggered by two switches, thereby increasing security.



Skyfold is pleased to be an official member of the U.S. Green Building Council. Skyfold walls are constructed with up to 97% recycled materials. If, for whatever reason, your Skyfold wall needs to be discarded, please consult your local recycling and disposal regulations. You may also contact your authorized local Skyfold dealer for assistance.

Warning

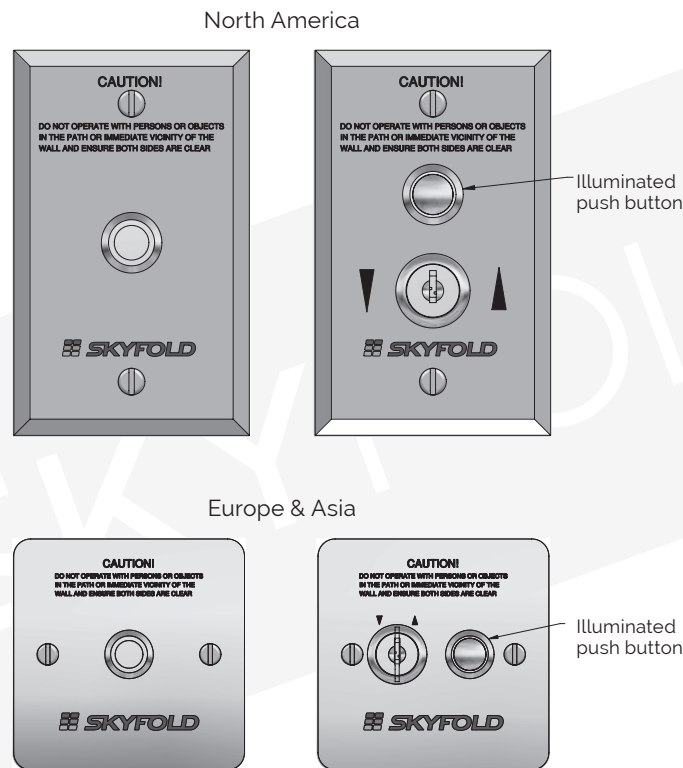


- Two operators, one per switch on both sides of the wall, are required for the duration of the wall's operation.
- Do not place objects between the panels, underneath the Skyfold wall, or in the near vicinity of the Skyfold wall as this can damage the Skyfold wall when it is in motion.
- Skyfold walls could pose a pinching and/or crushing hazard. Do not operate your Skyfold wall with persons or objects in the path or immediate vicinity of the Skyfold wall and ensure that both sides of the Skyfold wall are clear of obstructions.
- In case of a malfunction, do not operate the Skyfold wall or attempt to repair it. Call your authorized local Skyfold dealer for service.
- Do not operate your Skyfold wall if it is making any abnormal noises or if the Skyfold wall does not appear to be working properly. Contact your authorized local Skyfold dealer immediately.
- Do not operate your Skyfold wall if a panel is loose or displaced from its normal, securely fastened position.
- Do not operate your Skyfold wall if panels are missing as this can damage the system.
- Heat generated by lights inside the ceiling pocket can damage the panels. Lights that are located inside the Skyfold ceiling pocket must be turned on only when the wall is completely down and never when the wall is partially or fully retracted into the pocket.
- When an obstruction causes the Skyfold wall to halt its descent, the wall will auto-reverse for three (3) seconds. The obstruction must be cleared prior to resuming the wall's descent.
- Skyfold walls are intended only for interior use in which the room is climate-controlled.

OPERATING SWITCHES

Before operating the switches, please read the safety precautions and the procedures contained in the section, **Skyfold Walls in Operation**.

Figure 1a: Key Switch (Standard)



In an effort to optimize the safety features provided by the Skyfold wall, one switch is installed on both sides of the Skyfold wall. These switches control the wall's movement. Both switches must be activated simultaneously for the wall to move upwards or downwards while the key is turned to the desired position. This ensures that there are two people present at all times during the operation of the wall.

When one of the switches is released, the wall stops immediately without coasting.

The keyed switch plate includes an illuminated push button that flashes fault codes if the Skyfold wall does not work when activated. One to ten flashes represent ten different flash codes (see *Figure 1a*).

Figure 1b: Touch Screen Operator Station (Standard on Zenith Premium)



If your Skyfold system is equipped with the optional touch screens, please refer to the **Touch Screen User Manual** issued separately. The touch screens must be activated simultaneously to operate the wall. The 4.3" resistive LCD touch screens, with multilingual capabilities and a 4-digit adjustable user pin, will display one to ten possible fault codes in case of an electrical system failure.

For more on fault codes, please refer to the section, **Additional Servicing**.

LIFTING MECHANISMS AND PANELS

Figure 2: Lifting Mechanisms and Panels

CLASSIC

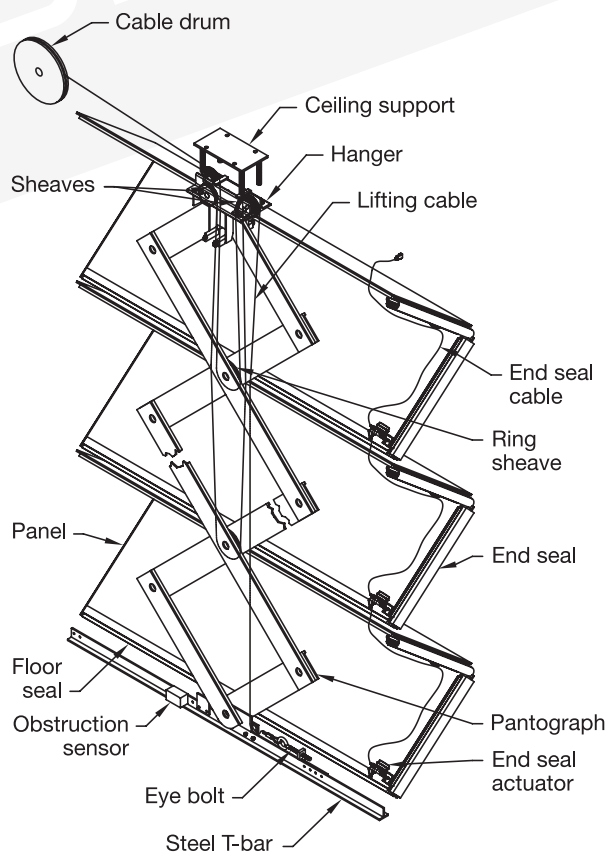
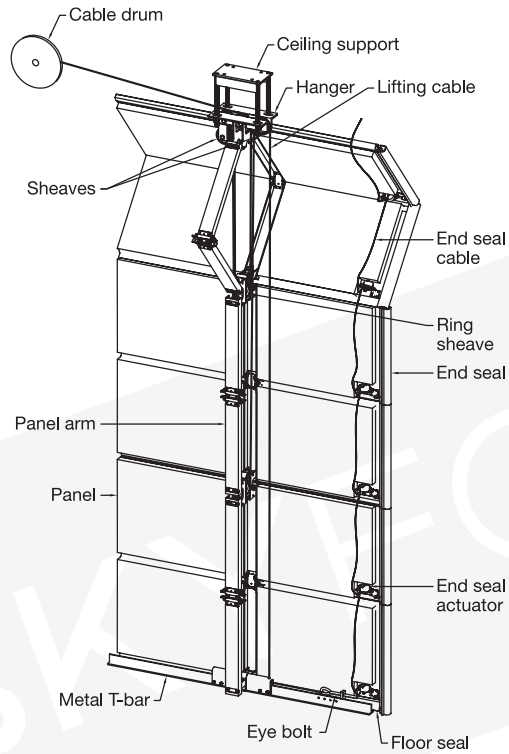


Figure 2: Lifting Mechanisms and Panels (cont'd)

ZENITH



ZENITH PREMIUM

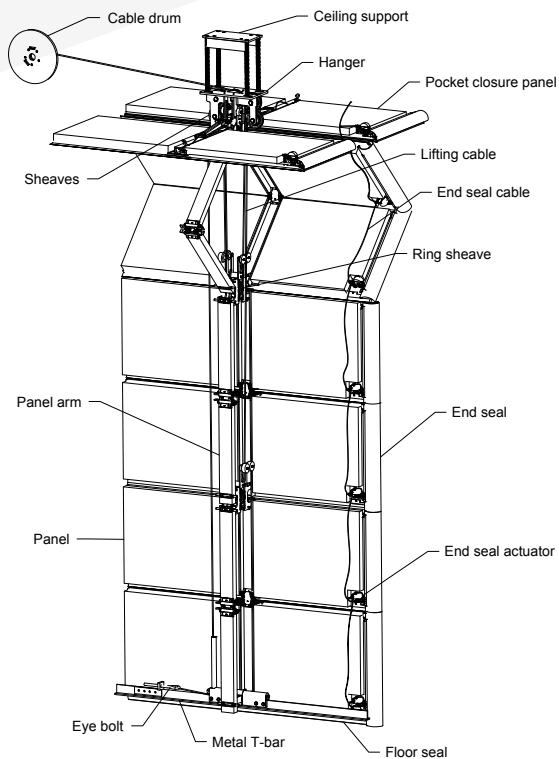
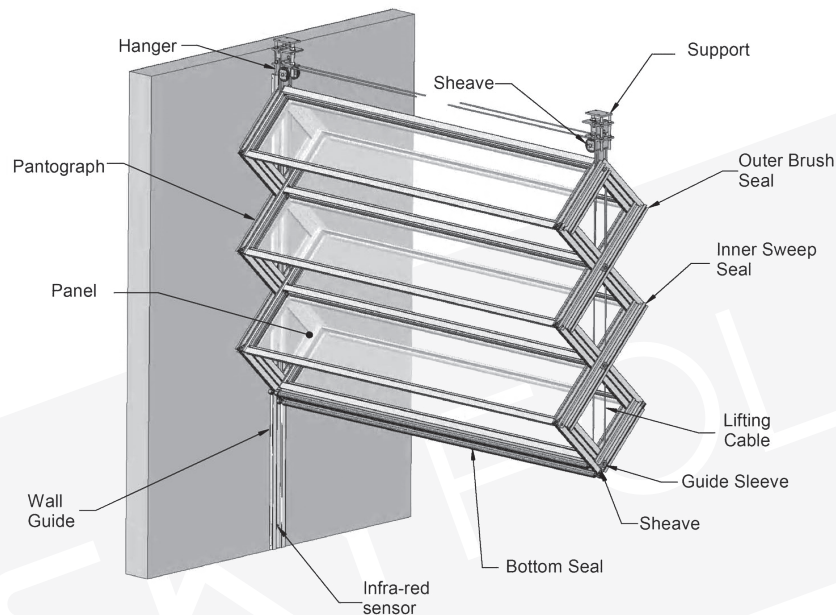


Figure 2: Lifting Mechanisms and Panels (cont'd)

MIRAGE (Glass Panels)



Lifting Mechanisms

The internal skeleton of the Skyfold wall consists of a series of lifting mechanisms that are made of structural grade aluminium and steel. For greater longevity and silent operation, all mechanical pivot points are made of high strength steel bolts or pins on plastic bushings. Aircraft-grade wire rope or cables, of the highest strength and quality, pass through the mechanisms and fold and unfold the mechanisms as they wrap and unwrap on their respective drums (see *Figure 2*).

Panels (All Models Except Mirage)

The panels are a composite construction with a heavy-gauge steel face sheet to resist abuse. Your choice of finish was carefully applied to the panels. A removable protective coating protects it from dirt and other debris (see *Figure 2*).

The protective coating must be removed two weeks after the date of shipment at the latest. The panels must be stored in a dry, climate-controlled area.

Glass Panels (Mirage Only)

Skyfold Mirage walls have a single laminated glass composition, which consists of 3/16" (5 mm) annealed glass + 0.060" (1.5 mm) film + 3/16" (5 mm) annealed glass. Overall thickness: approximately 7/16" (11.5 mm) (see *Figure 2*).

The glass panel's construction also provides superior acoustic properties. According to industry norms, the single laminated glass panels alone have a Sound Transmission Class (STC) rating of 36 (Rw 36). The Mirage wall as a system has an STC rating of 33 (Rw 33) in accordance with ASTM E90 (ISO 140-3).

Cables

The cables that lift and support the Skyfold wall are aircraft-grade wire cables of the highest strength and quality. These cables are sized to offer a high factor of safety. Each of these cables is attached to and lifted by a separate drum and each drum is keyed into the solid-steel line shaft. In the unlikely event that a cable fails, the other cables will not be affected (see *Figures 2 and 5*).

Sheaves (Pulleys)

As illustrated in *Figure 2*, the lifting cables wrap around the sheaves, thereby providing an additional pick-up point

End seals

The flexible end-seal membranes fill the vertical gap between the Skyfold panels and the fixed walls to form a tight acoustic seal (see *Figure 3a*). On the Mirage model, fixed brush and sweep seals glide on the wall track to close the gap between the wall track and the lifting mechanisms, and thus provide a visual barrier (see *Figure 3b*).

The Skyfold wall halts its descent when the lower limit switch stops the lifting motor, at which point the vertical end seals are activated automatically. **It is not necessary to maintain pressure on the operator switch once this limit switch is tripped.**

The end seals deploy and retract in approximately eight (8) seconds. The end seals retract automatically when you raise the wall from its fully closed position. As a default setting, the wall will not begin to rise until the end seals are completely retracted. At the time of installation, the wall can be programmed to start rising once the end seals have cleared of the fixed walls (see *Figure 3a*). Conversely, the brush and sweep seals on the Mirage model do not retract.

The Skyfold wall can lose some of its acoustic properties if a seal does not activate or if a gap is still present after the seals were activated. Moreover, an un-retracted seal dragging on the fixed wall can cause damage to the seal (see *Figures 2 and 3a*).

Warning



- Do not operate your Skyfold wall if some or all of the vertical end seals do not retract. If either condition occurs, contact your authorized local Skyfold dealer for service. Please note, on the Mirage model, the brush and sweep seals do not retract.

Figure 3a: Vertical End Seals at Fixed Wall

CLASSIC/ZENITH/ZENITH PREMIUM

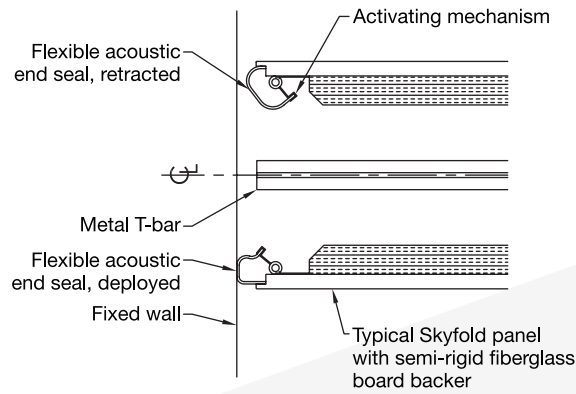
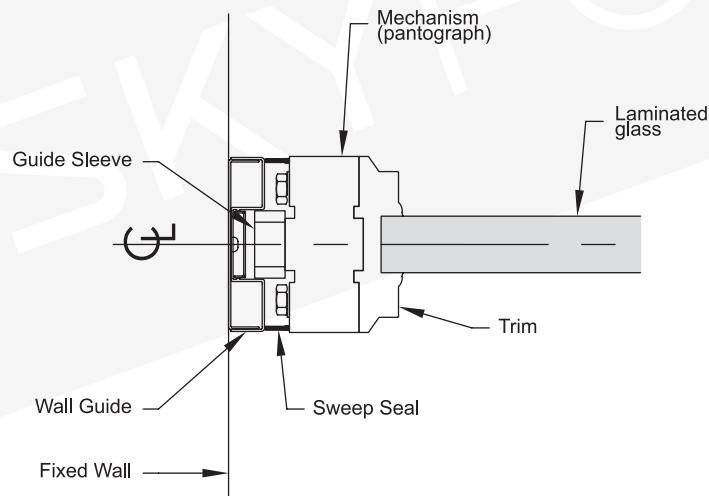


Figure 3b: Vertical End Seals at Fixed Wall

MIRAGE



Floor Seals

On the Classic, Zenith and Zenith Premium models (Figure 4a) and on the Mirage model (Figure 4b), flexible bulb seals close the gap between the floor and bottom panel.

Figure 4a: Obstruction Sensor and Floor Seals

CLASSIC/ZENITH/ZENITH PREMIUM

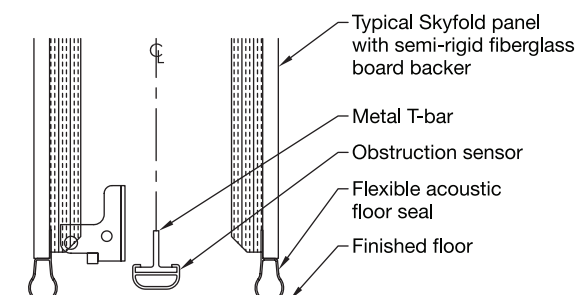
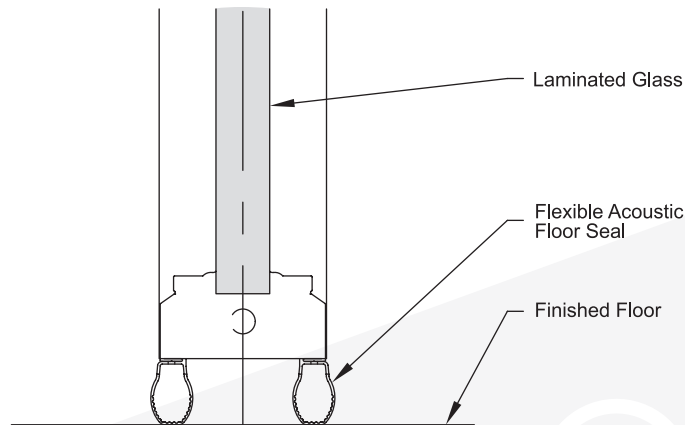


Figure 4b: Floor Seals

MIRAGE**Obstruction/Infra-Red Sensor**

On the Mirage model, an infra-red sensor is located on the bottom of the wall track. On all other models, the bottom edge of the wall is equipped with an obstruction sensor (see *Figure 4a*) that runs the entire length of the wall. If the obstruction sensor comes in contact with an obstruction—or if the infra-red beam is broken—while the wall is descending, then the power is cut to the lifting motor, the electromagnetic brake engages, and the wall's descent instantly halts. The wall will then automatically reverse direction for three (3) seconds (see *Figures 2 and 4a*).

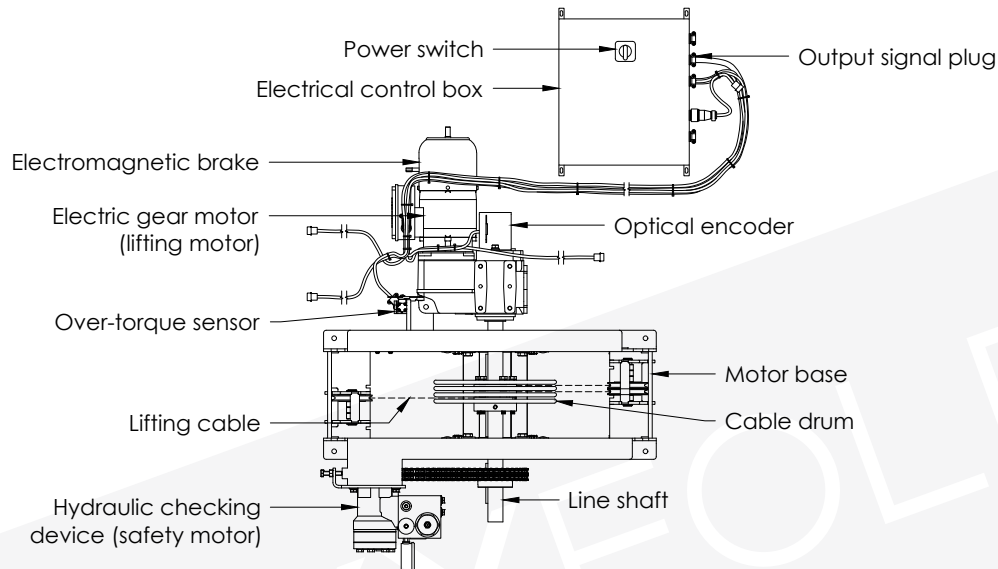
Warning

- The obstruction sensor on the Classic, Zenith and Zenith Premium models will not detect any obstruction that is less than 3" (76 mm) from the ends of the wall.
- After the wall reverses direction for three (3) seconds, you must remove the obstruction prior to resuming the Skyfold wall's descent.
- If the wall has sustained damage, do not operate the wall. Call your authorized local Skyfold dealer for an immediate inspection.

Note that the pneumatic sensor on the Classic, Zenith and Zenith Premium models is an integral part of the obstruction sensor and is illustrated in *Figures 2 and 4a*.

MOTOR UNITS

Figure 5: Standard Drive Unit



This manual is accompanied by shop drawings that clearly illustrate the location of the motor.

Electric Gear Motor (Lifting Motor)

Your Skyfold wall system is equipped with a sealed, heavy-duty gear motor that powers the entire system. This lifting motor is designed for hundreds of stops and starts an hour and is rated for service several orders of magnitude more severe than the service it experiences while operating your Skyfold wall.

The lifting motor is equipped with an electromagnetic brake. Power to the lifting motor is cut and its electromagnetic brake engages automatically when one of the following occurs:

- An operator switch is released;
- The wall reaches its upper limit (fully retracted into the pocket);
- The wall reaches its lower limit (fully closed position);
- While descending, the obstruction sensor/infra-red beam (Mirage) is triggered;
- While ascending, the over-torque sensor detects excessive torque on the motor;
- The thermal-overload relay in models >1hP, which is located in the electrical control box, detects excessive current being drawn by the motor;
- A short circuit is detected on the 12V or 24V line or if the polarity is reversed;
- The main power switch, breaker or fuse is tripped.

Without power, the electromagnetic brake can be released manually by pulling the brake release lever. This allows the wall to descend under its own weight. Its speed is controlled by the hydraulic checking device. The system must be recalibrated before it can be used again. Leave the control box disconnect switch in the OFF position until it can be recalibrated by a certified Skyfold installer.

Spring-Cushioned Torque Arm

A spring-cushioned torque arm supports the motor assembly in order to soften the starts and stops of the system. As part of this assembly, a sensor on the torque arm detects higher than normal torque levels. In the event of a mechanical jamming in the system, or if the upper limit switch fails to operate, the over-torque sensor quickly cuts power to the motor (see *Figure 5*).

Line Shaft

The line shaft that rotates all of the cable drums is continuous through the gear motor without a coupling. A better interface between the gearbox and the line shaft ensures a higher degree of safety (see *Figure 5*).

Hydraulic Checking Device (Safety Motor)

A hydraulic checking device, also known as a hydraulic parachute, is separate from the gear motor assembly and is powered by the line shaft itself (see *Figure 5*).

When the wall is traveling downwards, this hydraulic checking device builds up a certain hydraulic pressure that is dependent on the wall's travel speed. In normal operation, the pressure is very low, thus the checking device offers no appreciable braking force on the wall. If the wall speed becomes substantially higher than normal, the checking device offers sufficient braking force to lower the wall at a speed of approximately 150% of the normal operating speed.

Electrical Control Box

Skyfold's electrical control box meets Underwriters Laboratories (UL), Canadian Standards Association (CSA) and European Conformity (CE) requirements. The enclosure itself is constructed of heavy-gauge steel. It is typically located within 15 feet (4.5 meters) of the motor unit and is accessible via an access panel in the ceiling. For warranty protection, it has a manufacturer's seal, thereby deterring unauthorized tampering.

There is a main power switch on the cover of the electrical control box (see *Figure 5*).

In the event that your Skyfold wall does not operate at all, verify that the main power switch is in the ON position. Any other type of maintenance or repair work must be performed by your authorized local Skyfold dealer. Unauthorized work will void the Skyfold warranty, as stated in the warranty section of this owner's manual. In case of a system failure or fault, the illuminated push button will repeatedly flash one to ten times while activated. The number of flashes is representative of the error encountered (fault code). If equipped with the optional touch screen operator station, the touch screen will display a written fault code. The fault code must be relayed to the Skyfold dealer in order for them to take the necessary action.

Upper (Open) and Lower (Closed) Limit Controls

Your Skyfold wall stops automatically upon reaching its upper limit (fully open) position or its lower limit (fully closed) position. There is no need for the operator to carefully time the release of the operator switches. These limits are set by the Skyfold installer at the time of installation.

AV / Dry Contact for Linked Building Systems

For integration with other building systems, your Skyfold wall system is equipped with dry contacts identifying when the wall is in the "up" or "down" position. The dry contacts are sourced from the control box and are labelled as such (see *Figure 6*).

A maximum power supply of 24 volts is provided by the A/V system that is to be controlled by these contacts. Skyfold provides a connector plug and a 6" (150 mm) long extension cord to the A/V dry contacts found on the outside of the control box (see *Figure 6*). The extension cord comes with a male and female connector. A separate female connector is supplied for the connection to the A/V system. The male connector on the extension cord has the following wire designations:

- Black #1 – Wall Down Com1
- White #2 – Wall Down Dry Contact 250mA
- Red #3 – Wall Up Com1
- Green #4 – Wall Up Dry Contact 250mA

Using 18 or 22-gauge wires, the electrician connects the A/V system to the pins in the separate female connector. Access to the interior of the control box is not required for this hook-up and a manufacturer's seal deters unauthorized entry.

Warning



- Only qualified Skyfold personnel are authorized to perform any type of maintenance and/or repair work on your Skyfold system. Unauthorized work will void the Skyfold warranty, as stated in the warranty section of this owner's manual.

Figure 6: A/V Dry Contact Plug (Position Signal)



A/V Dry Contact Connector Plug

Warning



- Heat generated by lights inside the ceiling pocket can cause the Skyfold panels to delaminate. Lights that are located inside the Skyfold ceiling pocket must be turned on only when the wall is completely down and never when the wall is partially or fully retracted into the pocket.

The time required for a Skyfold wall to ascend or descend varies depending on the size of the wall. On average, a Skyfold wall takes approximately two (2) minutes to either completely travel upwards or downwards.

OPERATING A SKYFOLD WALL

The following procedures apply to normal operating situations.

Warning



- Two operators, one per switch on both sides of the wall, are required for the duration of the wall's operation.
- Do not place objects between the panels, underneath the Skyfold wall, or in the near vicinity of the Skyfold wall as this can damage the Skyfold wall when it is in motion.
- Skyfold walls could pose a pinching and/or crushing hazard. Do not operate your Skyfold wall with persons or objects in the path or immediate vicinity of the Skyfold wall and ensure that both sides of the Skyfold wall are clear of obstructions.
- In case of a malfunction, do not operate the Skyfold wall or attempt to repair it. Call your authorized local Skyfold dealer for service.
- Do not operate your Skyfold wall if it is making any abnormal noises or if the Skyfold wall does not appear to be working properly. Contact your authorized local Skyfold dealer immediately.
- Do not operate your Skyfold wall if a panel is loose or displaced from its normal, securely fastened position.
- Do not operate your Skyfold wall if panels are missing as this can damage the system.
- Heat generated by lights inside the ceiling pocket can damage the panels. Lights that are located in the Skyfold ceiling pocket must be turned on only when the wall is completely down and never when the wall is partially or fully retracted into the pocket.
- When an obstruction causes the Skyfold wall to halt its descent, it will auto-reverse for three (3) seconds. You must clear the obstruction prior to resuming the wall's descent.
- It is prohibited to use your Skyfold wall(s) to lift material, objects and/or persons

Standard Operation

1. Ensure that both operators of the Skyfold wall have an unobstructed view of the wall. The Skyfold wall must be monitored from both sides of the wall for the duration of the wall's ascent or descent as this can prevent damage to the Skyfold wall, and/or injury.
2. At both switches, activate and maintain pressure simultaneously on the switches with the key turned to the desired position. If your Skyfold system is equipped with the optional touch screens, please refer to the **Touch Screen User Manual** issued separately.
3. Release the switches once the desired position is reached or after the wall stops automatically by its upper or lower limit controls.

OPERATING A "T" CONFIGURATION APPLICATION

The following procedures apply to situations wherein two Skyfold walls meet in a "T" Configuration. In a "T" Configuration, one wall stacks above the other in the ceiling pocket. The wall operating sequence is entirely controlled by the key switch (or touch screen) logic circuit in the electrical control box.

1. Ensure that both operators of the Skyfold wall have an unobstructed view of the wall. The Skyfold wall must be monitored from both sides of the wall for the duration of the wall's ascent or descent as this can prevent damage to the Skyfold wall and/or injury.
2. When deploying the Skyfold walls in the down position, ensure that the lower Skyfold wall is in the fully closed position before bringing down the upper Skyfold wall.
3. When retracting the walls, ensure that the upper Skyfold wall is fully retracted into its ceiling pocket before bringing up the lower Skyfold wall.
4. At both switches, activate and maintain pressure simultaneously on the switches with the key turned to the desired position. If your Skyfold system is equipped with the optional touch screens, please refer to the **Touch Screen User Manual** issued separately.
5. Release the switches once the desired position is reached or after the wall stops automatically by its upper or lower limit controls.

OPERATING MULTIPLE IN-LINE SKYFOLD WALL SECTIONS

Multiple Skyfold wall sections, controlled by a single pair of switches with their own independent motor units, are used to create a monolithic Skyfold barrier across long distances or over stepped or sloped floors.

The following is not applicable to the Mirage model: There are mechanical acoustic seals between each Skyfold wall section, similar to those found at the ends of the Skyfold wall, which deploy and fill the gap between wall sections. The mechanical seals deploy automatically once all wall sections reach their lower limits. When raising the Skyfold wall sections from their completely closed positions, there is a default delay of approximately eight (8) seconds while all the mechanical seals retract. At the time of installation, the wall can be programmed to start rising once the end seals have cleared of the fixed walls.

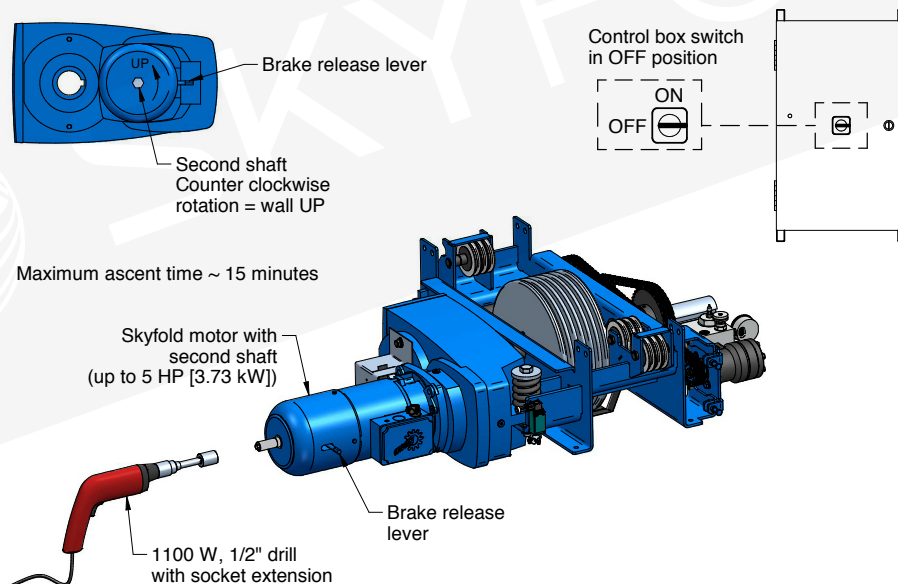
On the Mirage model, regular fixed sweep and brush seals are used to close the gap between each Skyfold wall section.

All Skyfold wall sections operate simultaneously. However, the Skyfold wall sections take different amounts of time to reach their upper and lower limits because of the following factors:

- There could be slight differences in the motor speeds of these wall sections.
- For sloped or stepped floors, there is a difference in height between the upper and lower limits of the Skyfold wall sections.

In these instances, the procedure to operate the Skyfold wall is the same as the standard operation. However, the switches must be activated for the entire duration that it takes all sections to reach their respective upper (open) or lower (closed) limits.

BACK-UP OPERATING PROCEDURE



In the unlikely event that the Skyfold wall does not respond to the key switch operation, it could be operated by using a heavy-duty drill. A shaft extension through the fan cover of the motor allows for an alternate method of raising and lowering the wall. The system must be recalibrated before it can be used again. Leave the control box disconnect switch in the OFF position until it can be recalibrated by a certified Skyfold installer. Please note, this diagram is for illustration purposes only.

Please contact your authorized local Skyfold dealer for complete operating instructions.

Only qualified Skyfold personnel are authorized to perform any type of maintenance and/or repair work on your Skyfold wall. However, as the owner of a Skyfold wall, you must assume the basic cleaning responsibilities related to your Skyfold wall.

Warning



- Unauthorized work will void the Skyfold warranty, as stated in the warranty section of this owner's manual.

Periodic servicing and inspection of certain components of the Skyfold wall must be performed to ensure that its mechanical performance, acoustic properties and aesthetics are prolonged and that it operates safely, as originally designed and installed. Contact your authorized local Skyfold dealer for service as per the maintenance schedule outlined below.

PERIODIC MAINTENANCE

A cycle is defined as follows: the Skyfold wall has completed one ascent and one descent.

EVERY 500 CYCLES OR 1 YEAR

Wall Height Adjustment (Upper and Lower Limits)

Over time, the lifting cables may stretch. Consequently, the upper (open) position limit and the lower (closed) position limit may need resetting.

- The upper and lower limits must be verified, inspected and adjusted.

Warning



- The Skyfold wall should automatically stop once it reaches either of these limits. If it does not, do not operate the wall. Call your authorized local Skyfold dealer for service.

Lifting Cables and Rigging Hardware

- The lifting cables, drums, bearings, sheaves (pulleys), couplings, tie-offs, and other rigging hardware must be inspected for wear, alignment and fit.

Lifting Motor Gearbox

- Inspection of the lifting motor gearbox

Electromagnetic Brake

- Inspection of the electromagnetic brake

EVERY 500 CYCLES OR 1 YEAR

Hydraulic Checking Device (Safety Motor)

The hydraulic checking device assembly includes a manifold, a reservoir, a pressure gauge, a hydraulic motor, and a sprocket and chain. During normal operation, the gauge pressure should be 0-100 psi (0-800 kPa) while the wall is ascending and 200-300 psi (15000-2000 kPa) while the wall is descending.

- The hydraulic checking device must be inspected, and its operating pressure verified.

1 YEAR AFTER INSTALLATION

Electrical System

- The entire electrical system must be tested, including the following: the control box, encoder, over-torque sensor, lifting motor, electromagnetic brake, obstruction/infra-red sensor, end seals, switches, and all plugs and cables.

In the event of a complete electrical system failure, check the main breaker before calling for service. Note the number of times the illuminated push button flashes when activated—or if your Skyfold is equipped with the optional touch screens, note the fault code displayed on the screen—and advise your authorized local Skyfold dealer.

Lifting Mechanisms

The lifting mechanisms require little maintenance over their 10,000-cycle life span.

- The lifting mechanisms must be inspected for defects and abnormal wear.

EVERY 500 CYCLES OR 2 YEARS (STARTING ONE YEAR AFTER INSTALLATION)

Hydraulic Checking Device (Safety Motor)

- The hydraulic oil must be visually inspected and, if necessary, changed.

EVERY 1000 CYCLES OR 2 YEARS (STARTING ONE YEAR AFTER INSTALLATION)

Electrical System

- The entire electrical system must be tested, including the following: control box, encoder, over-torque sensor, lifting motor, electromagnetic brake, obstruction/infra-red sensor, end seals, switches, and all plugs and cables.

EVERY 1000 CYCLES OR 2 YEARS (STARTING ONE YEAR AFTER INSTALLATION)

Lifting Mechanisms

The lifting mechanisms require little maintenance over their 10,000-cycle life span.

- The lifting mechanisms must be inspected for defects and abnormal wear.

EVERY 10 YEARS

Lifting Motor Gearbox

- The gearbox lubricant must be changed.

Hydraulic Checking Device (Safety Motor)

- The hydraulic oil must be changed.

ADDITIONAL SERVICING

In conjunction with the regular maintenance listed above, additional servicing described in this section may be necessary.

Fault Code on Switches

Your Skyfold wall is equipped with either a push button key switch or a touch screen operator station (optional feature). If the illuminated push button flashes repeatedly one to ten times while attempting to operate the Skyfold wall, then a fault was detected. Similarly, on the touch screen operator station, a written fault code will appear at the bottom of the screen. In either case, take note of the fault code and contact your authorized local Skyfold dealer for service.

Visible or Audible Problems

Your Skyfold wall should operate smoothly and quietly with only minor or barely detectable noises from moving parts, lifting cables and/or motors. When the wall is in the down position, the panels should form a flat vertical surface with approximately 1/2" (13 mm) gaps between panels. When the panels are stored in the pocket, the bottom (floor) panels form the bottom of the pocket. The panels should rest horizontally and fit neatly and evenly within the pocket (within manufacturer's tolerances). Similarly, when the Mirage wall is in the up position, all panels should be retracted into the ceiling pocket and should rest at an angle.

Warning



- Do not operate your Skyfold wall if it is making any abnormal noises or if it does not appear to be working properly. Contact your authorized local Skyfold dealer immediately.

Lifting Cable, Rigging Hardware and Hydraulic Checking Device (Safety Motor)

Over time, oil drips from the lifting cables and sheaves (pulleys); routine cleaning of drips may be required. In addition, lubrication of the chains and sprocket on the safety motor must be done according to the use of the Skyfold wall and according to the environment in which it is located. It is suggested to have the condition of the chains and cables inspected as well as the chain tension verified during each routine servicing visit.

Lifting Motor and Electromagnetic Brake

The electromagnetic brake halts the Skyfold wall's movement the instant that power is cut to the motor. If this is not the case, the electromagnetic brake may require adjustment.

CLEANING

As the owner of a Skyfold wall, you are responsible for cleaning certain parts of the wall.

Flexible and Fixed Perimeter Seals

Dust build-up on the rubber seals as well as on the brush and sweep seals featured on the Mirage models can be transferred to the fixed walls, the floor, and the wall track (Mirage only). If required, the brush and sweep seals on the Mirage model can be vacuumed. On all other models, the seals can be cleaned with a damp cloth.

Panel Cleaning

Dust may collect on the panels when they are stored in the ceiling pocket. The Mirage glass panels can be cleaned by using any regular glass cleaning product. The panels on all Skyfold models, including Mirage, can be vacuumed with a brush attachment or by other non-abrasive means.

Warning



- Do not use harsh solvents or cleaners. Consult the finish fabricator's cleaning specifications before attempting to clean the panels. If damaged, individual panels can be replaced or removed and repaired. (Contact your authorized local Skyfold dealer for service.)
- Do not operate your Skyfold wall if panels are missing as this can damage the system.

Skyfold Basic Warranty: The operable wall shall be warranted free from defects in material and workmanship for a period of two (2) years or five thousand (5,000) cycles, whichever occurs first.

Extended Parts Warranty (optional): An extended warranty on parts is available in addition to the basic warranty. It includes coverage on all parts (excluding touch screen operator stations) for a period of ten (10) years or five thousand (5,000) cycles, whichever occurs first.

Replacement parts are warranted for a period of one (1) year from the date of shipment or the balance of the original warranty period, whichever is longer.

Furthermore, Skyfold Inc. warrants that the acoustical performance of the Skyfold wall will be unaffected for a period of ten (10) years or five thousand (5,000) cycles, whichever occurs first.

In all the cases stated above, the period covered by the warranty begins on the date of shipment.

THIS WARRANTY DOES NOT COVER THE FOLLOWING:

- Parts and labor required to maintain the operable wall and all parts subject to normal wear and tear are specifically excluded from warranty coverage;
- Damages incurred from improper use or mistreatment;
- Excessive force beyond the normal daily operation of the product;
- Negligence;
- Acts of God.

Skyfold Inc. will carry out any repairs required to the Skyfold wall due to defects in materials or workmanship and occurring under normal use, at no charge for parts and/or labor during the warranty period, provided that:

- The Skyfold wall was operated according to manufacturer's specifications and/or operating instructions;
- The Skyfold wall was always operated by two people, one per side of the wall, each activating a switch wired in series with the other;
- All servicing and inspections were performed by an authorized local Skyfold dealer according to the maintenance schedule included in this manual;
- The Skyfold wall was operated in a normal environment similar to the one that prevailed when it was originally installed.

Maximum liability of Skyfold Inc. is limited to the initial purchase price of the product providing that required maintenance and servicing was done. By no means shall Skyfold Inc. be liable for any consequential, indirect, incidental or special damages arising from the sale or use of the product, whether by contract or otherwise.

Disclaimer: A formal and binding warranty is issued with the close-out documents after the final installation of the Skyfold system has taken place.