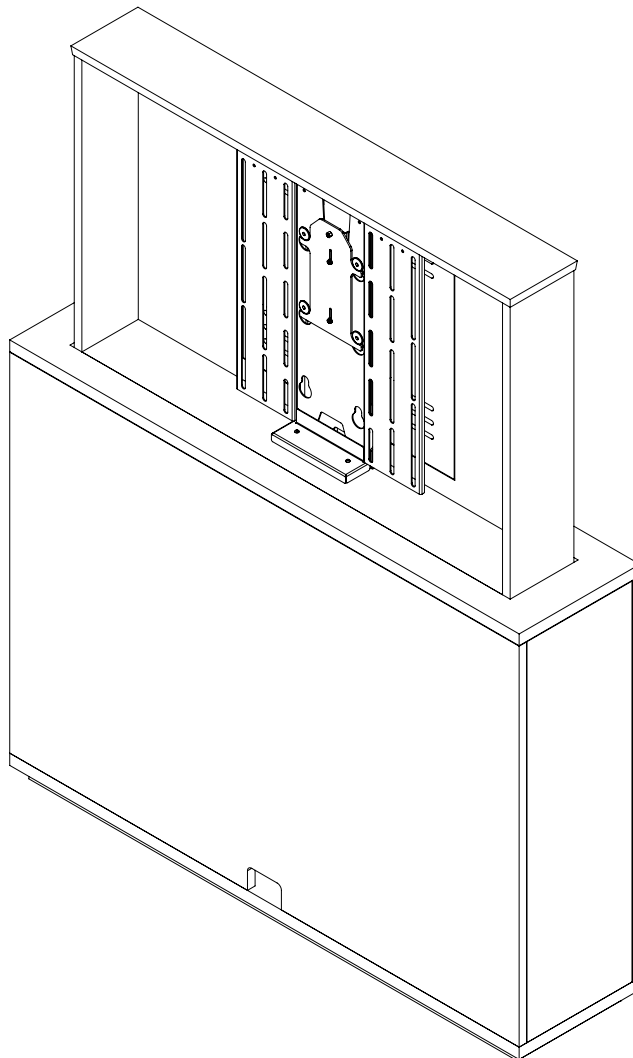




future automation

CABINET

SAFETY GUIDELINES FOR TV LIFT CABINET DESIGN



DESIGN GUIDE

ISSUE 001

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INTRODUCTION

This document sets out best practices for the integration of Future Automation mechanisms into cabinetry and furniture construction.

It is intended for use by designers, cabinet manufacturers, and installers involved in the planning, manufacture, and installation of furniture that incorporates motorised AV mechanisms.

Future Automation mechanisms include moving components that may extend, retract, rotate, or slide during operation. If these mechanisms are installed or enclosed incorrectly, they can create safety risks. These risks include trapping, crushing, impact, electrical hazards, and damage to the cabinet or surrounding structure. Such risks may occur during normal operation, during servicing or maintenance, or during unexpected movement.

This document explains general construction principles and concealment methods designed to reduce these risks. It covers topics such as breakaway panels, fixed panels, enclosures, access methods, back panel construction, storage separation, noise reduction, and vibration control.

The guidance in this document defines minimum safety and construction considerations. It is intended to support safe and reliable integration of Future Automation mechanisms but does not replace professional judgement, manufacturer instructions, or statutory requirements. Where differences exist, manufacturer guidance and local regulations must always take priority.

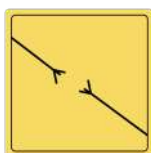
Responsibility remains with the designer, cabinet manufacturer, and installer to ensure that each installation is safe, compliant, and suitable for its intended use.

WARNING SYMBOLS

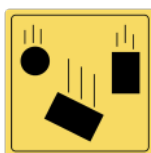
These symbols appear throughout this document to signify hazards and locations.



Crushing
Hazard



Cable
Snagging



Object
Falling



Mechanism
Damage



Falling
Hazard



Impact
Hazard



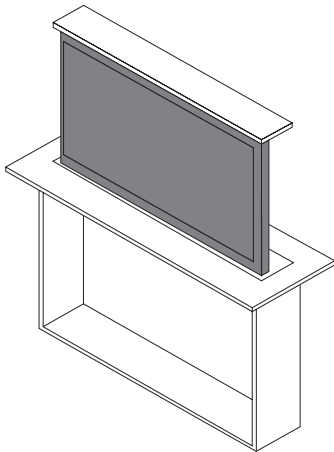
Tipping
Hazard

CONCEALMENT OVERVIEW

It is important to understand which mechanism concealment is being used.

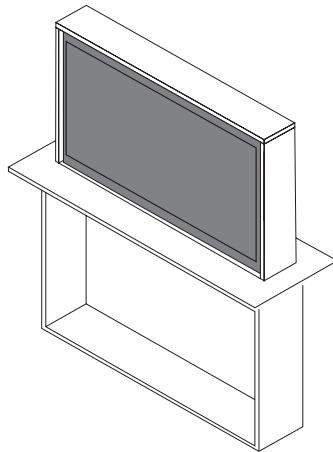
For a more specific overview of areas to consider, please see the relevant Considerations Sheet for the mechanism you are using. <https://fa.support/>

TOP AND BOTTOM FIXED PANEL



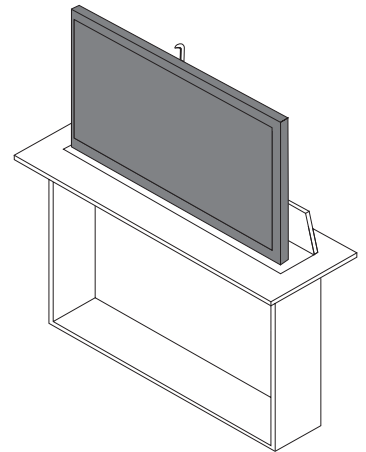
Lid and base move with the mechanism.

BOX ENCLOSURE



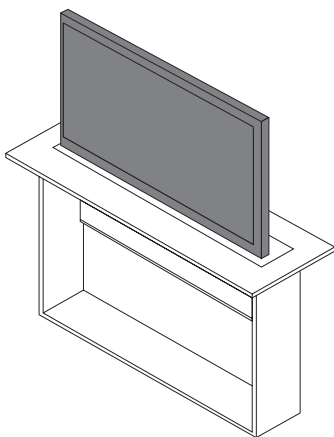
Similar to the top and bottom fixed panels however the screen is boxed in with side and back panels.

HINGE FLAP



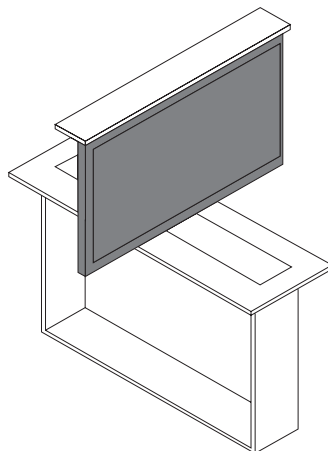
Flap lifts up to allow mechanism to extend upwards.

DROP AND ROLL & DROP AND SLIDE



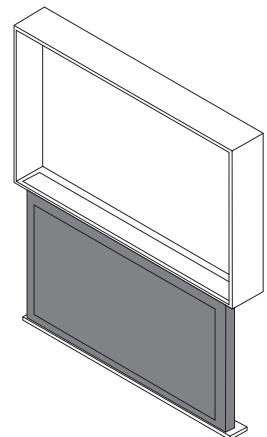
Flap retracts into the unit and hinges upwards before the mechanism extends.

SWIVEL



Same extension and retraction; however, the mechanism swivels 180° in each direction once open.

INVERTED

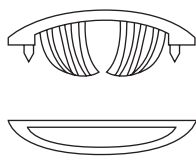


Same as top and bottom fixed panels, but inverted.

BREAKAWAY PANEL FIXINGS

Below are a few recommendations for creating breakaway panels. However, these are only suggestions, and it is ultimately the designer, cabinet manufacturer, and installer to ensure that the final installation is safe, compliant, and suitable for its intended use.

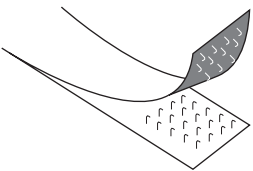
Examples of suitable breakaway fixings



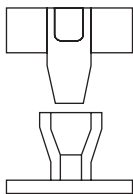
Lamello Tenso
P-10



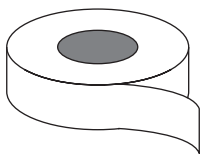
Locator Dowels



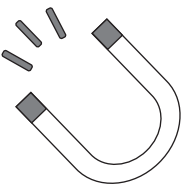
Velcro



KEKU Fixings

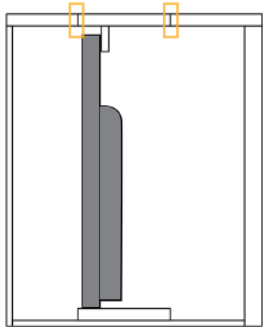
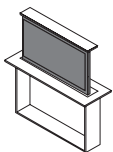


Double-sided
tape

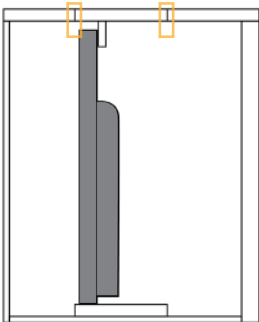
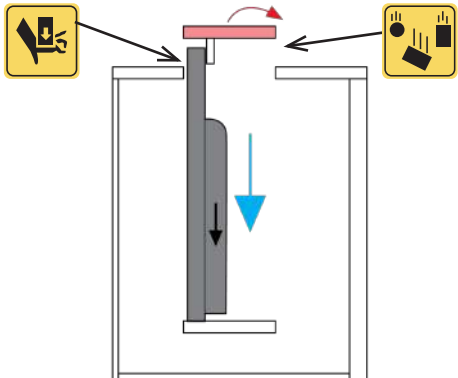
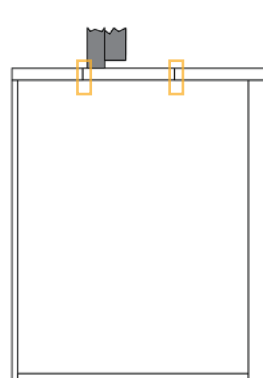
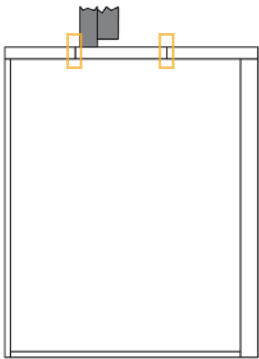
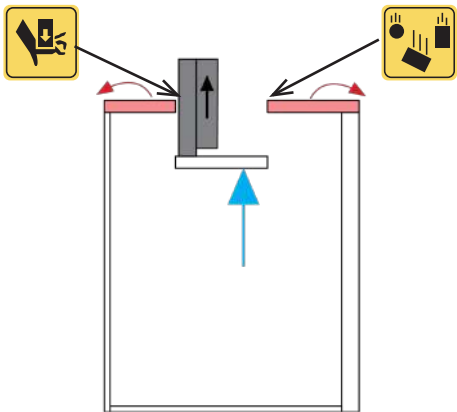


Magnets

TOP AND BOTTOM FIXED PANEL

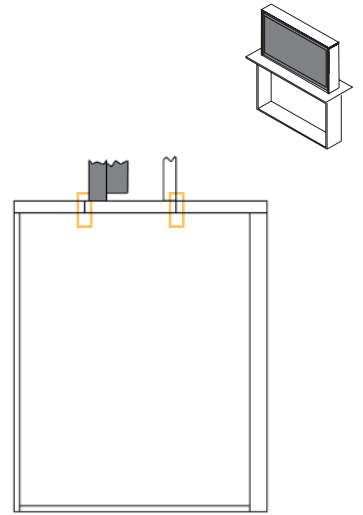
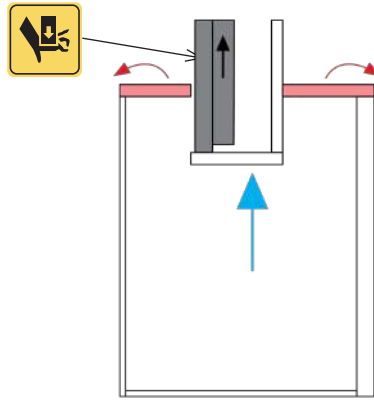
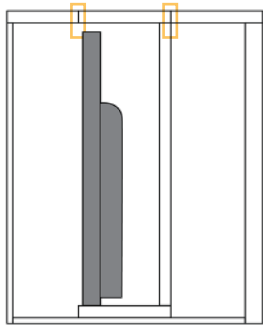


Retraction

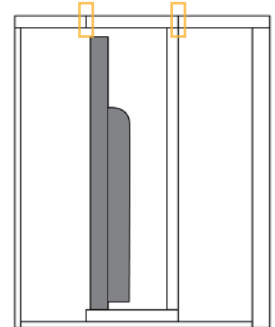
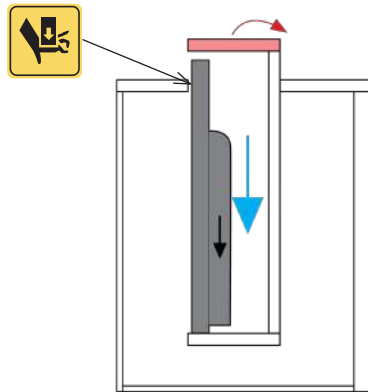
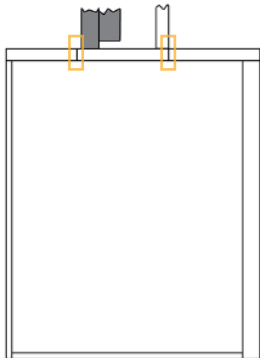


BOX ENCLOSURE

Extension

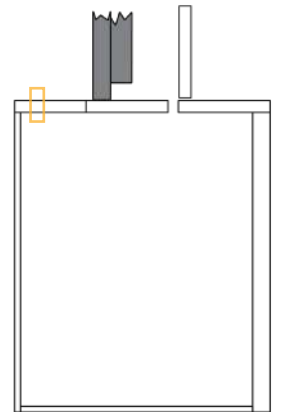
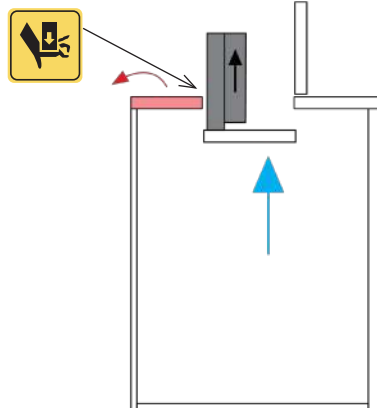
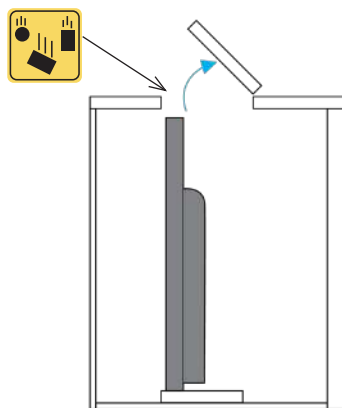
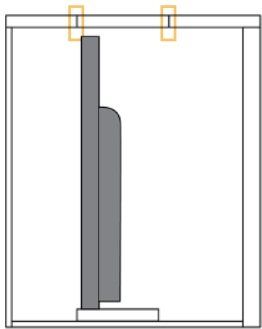


Retraction

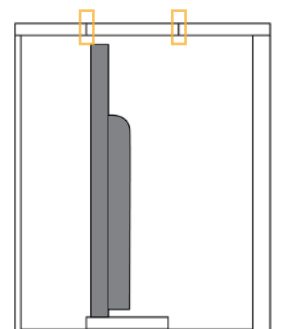
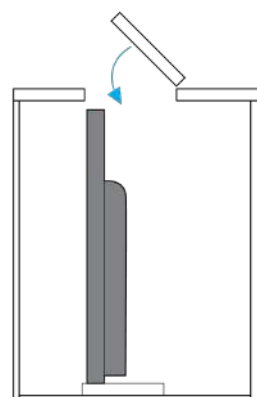
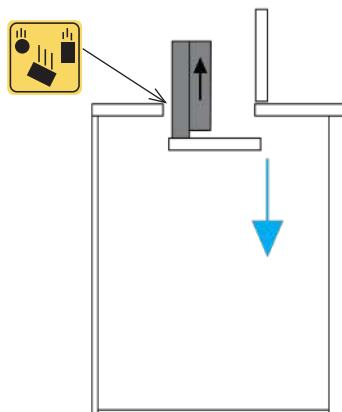
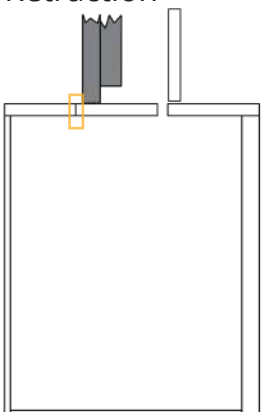


HINGE FLAP

Extension

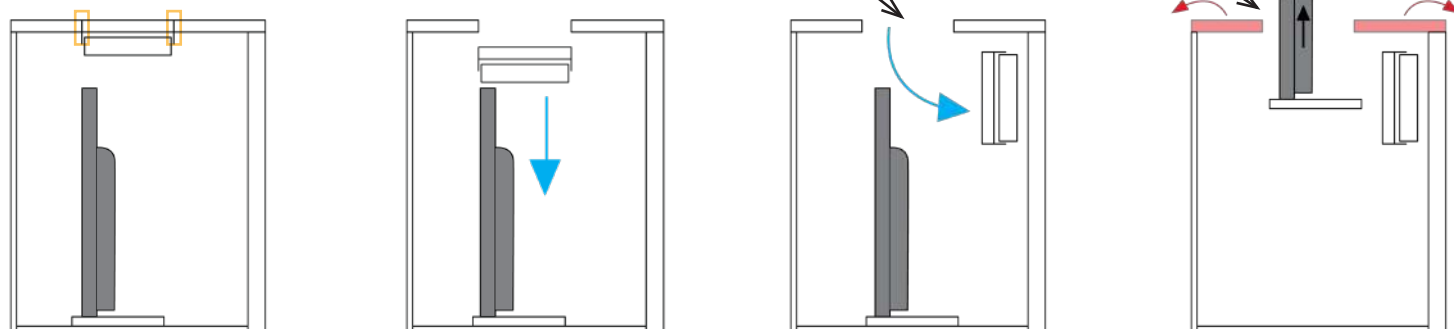


Retraction

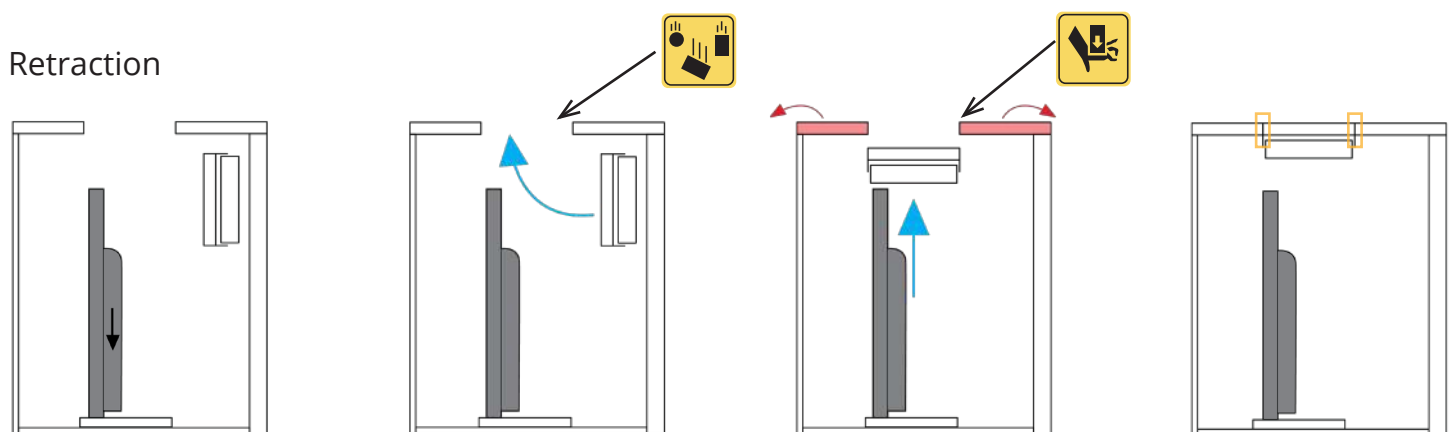


DROP AND ROLL

Extension

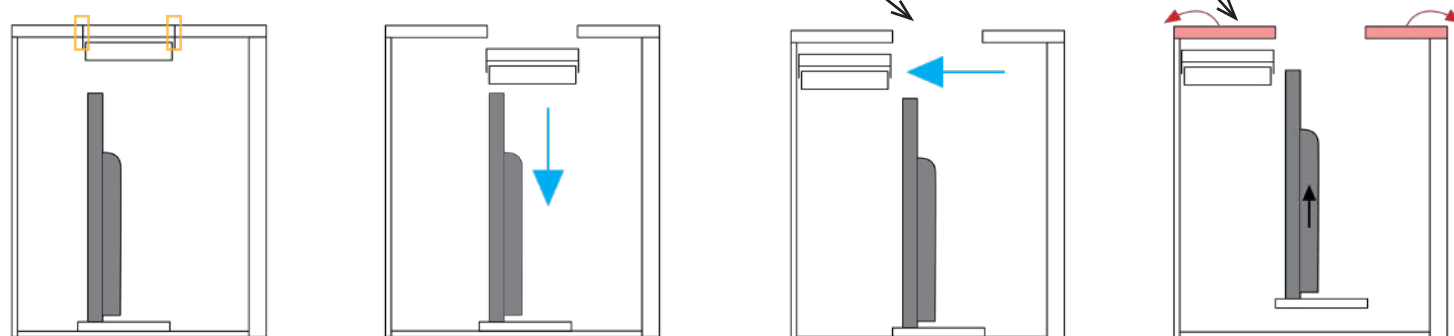


Retraction

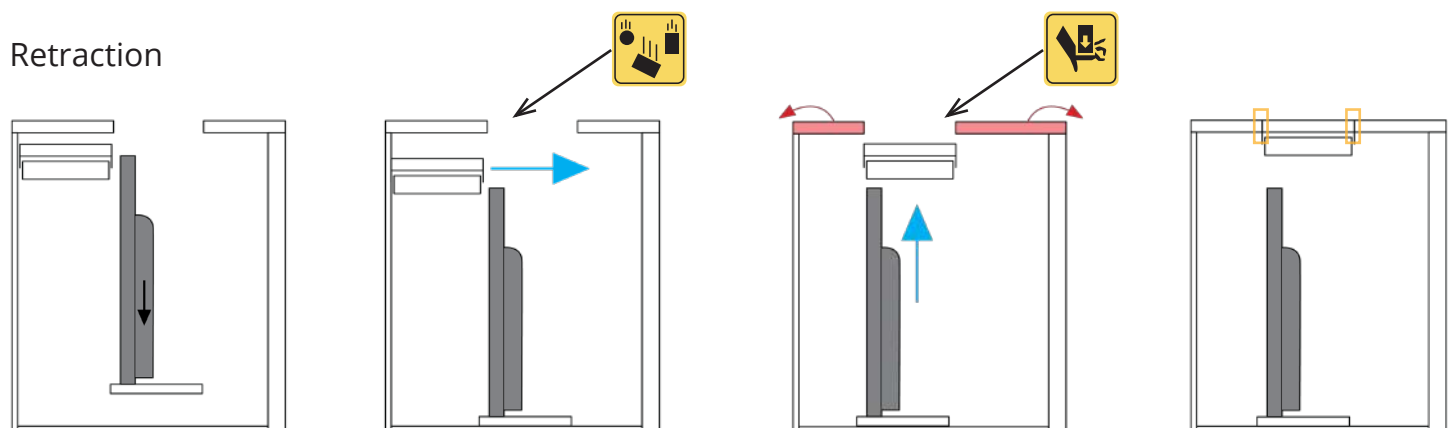


DROP AND SLIDE

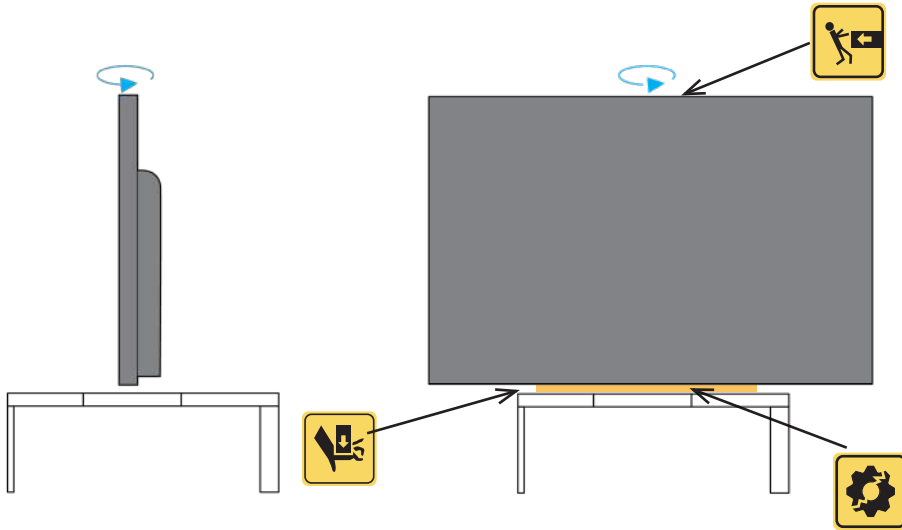
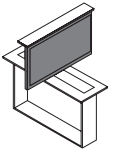
Extension



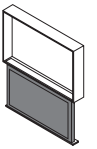
Retraction



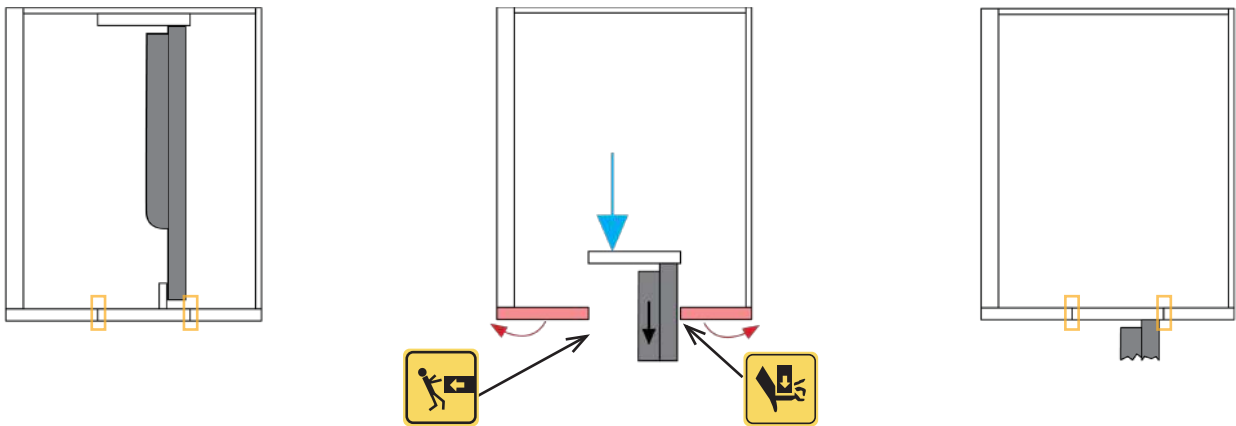
SWIVEL



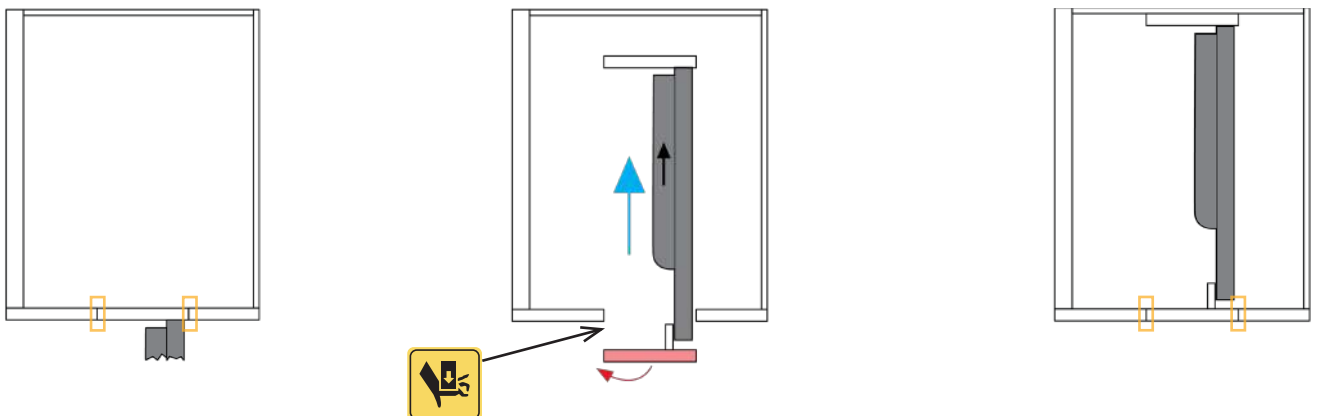
INVERTED



Extension

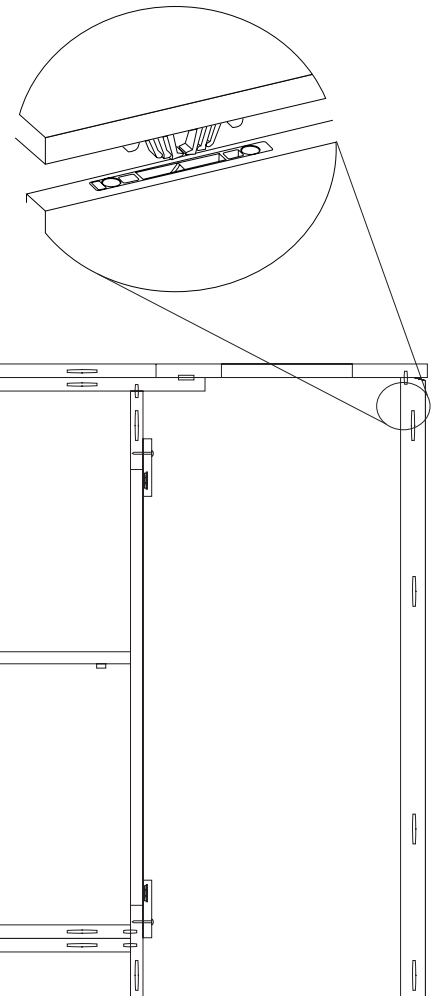
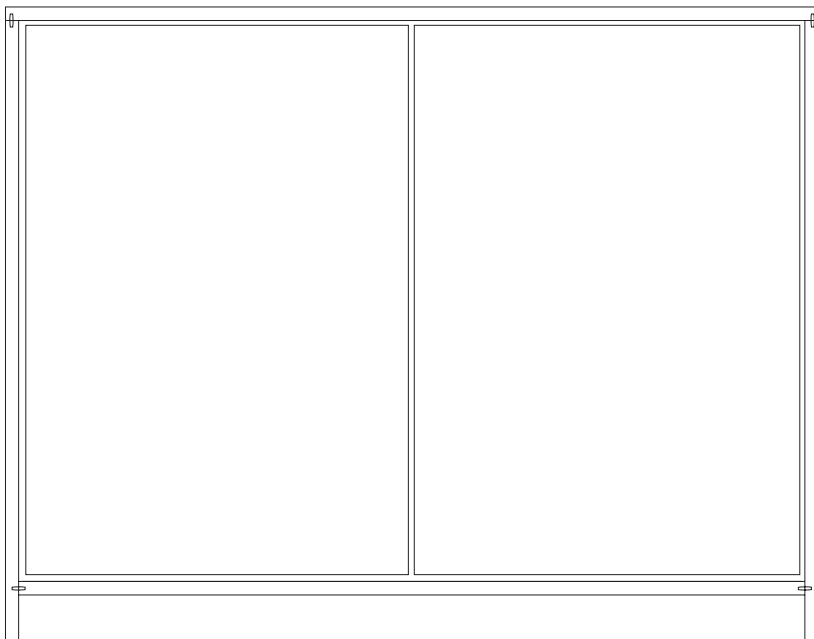


Retraction



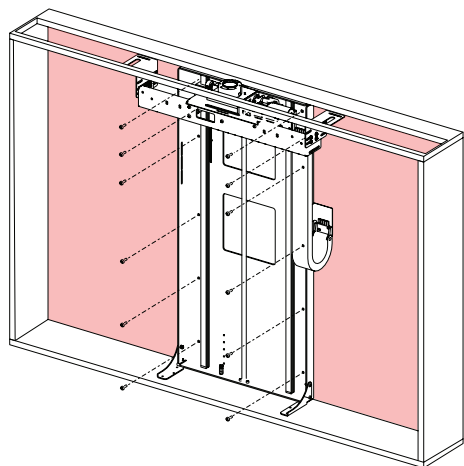
GENERAL CONSTRUCTION - OVERVIEW

This section shows an example of how to build a cabinet for a TV lift. It uses hidden fixings, such as Lamello Tenso P-10, to keep a neat finish while staying strong. The cabinet must include a 36 mm back panel, breakaway panels, shelves that can be adjusted or removed, and a removable inner back panel so the unit can be serviced.



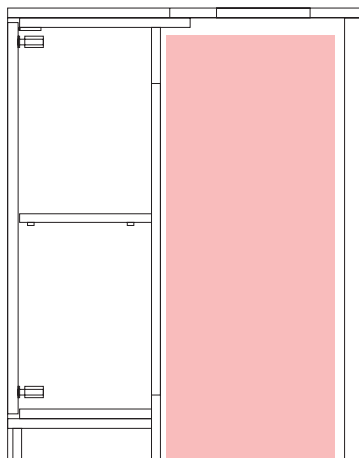
GENERAL CONSTRUCTION - KEY DETAILS

BACK PANEL



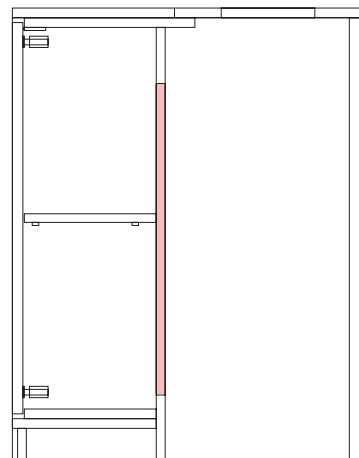
Mechanisms are fixed to the cabinet back panel. For this reason, the back panel must be **36 mm thick**.

SEPARATE STORAGE



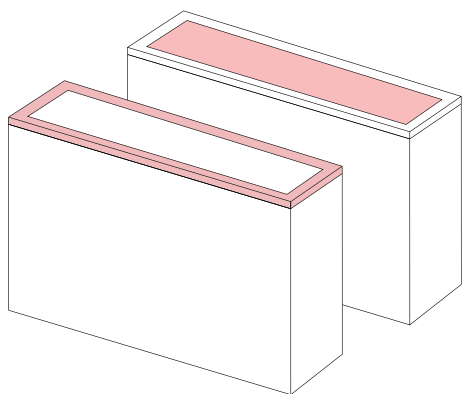
Mechanisms **MUST** be contained within a dedicated enclosure to prevent accidental interference.

ACCESS



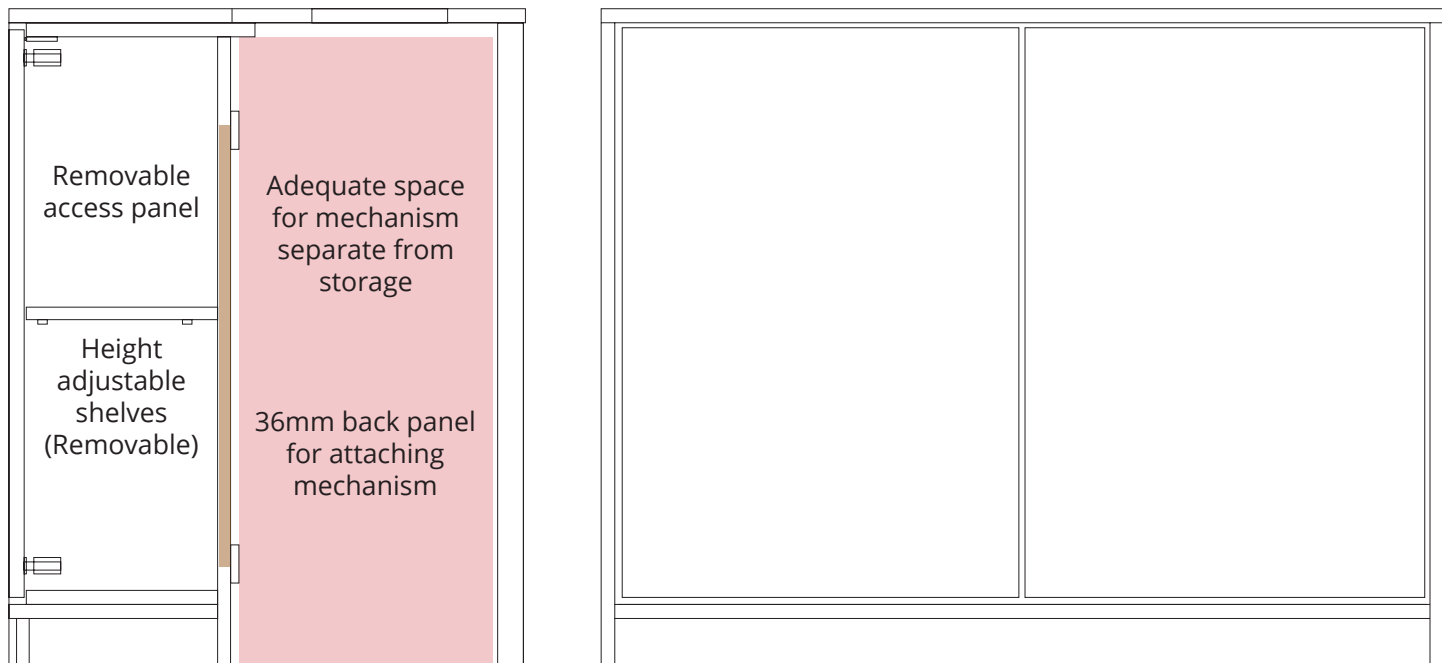
Access is **REQUIRED** to service and maintain the mechanism.

BREAKAWAY PANELS

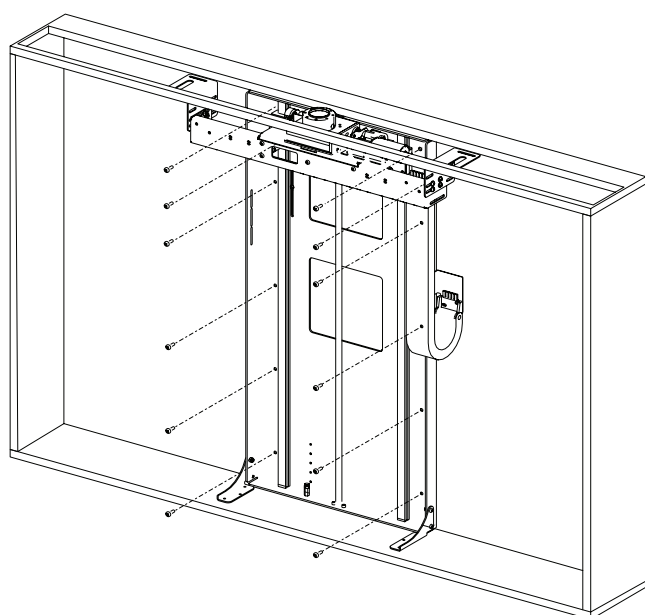


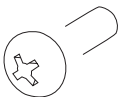
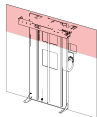
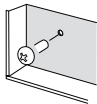
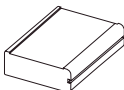
Cabinetry **MUST** be designed to reduce risks by using breakaway panels or other safety features where applicable.

GENERAL CONSTRUCTION - SEPARATE STORAGE/ ACCESS/BACK



Mechanism Mounting Considerations



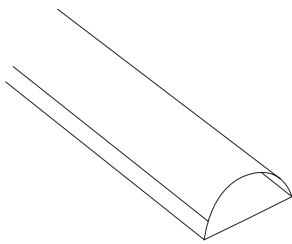
-  Use all available fixings (where possible).
-  Mandatory fixings in top 25%.
-  Fix into structural back panel only.
-  **DO NOT** omit upper fixings.
-  Keep control box out the way of mechanism

GENERAL CONSTRUCTION - WIRING

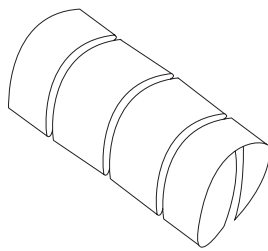
Any cabling connected to the mechanism **MUST** be securely restrained and kept clear of all moving and rotating parts.

Designated cable routes must be defined within the cabinet to prevent interference during operation.

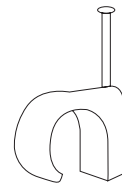
Where possible, cables should be installed within covered channels, trunking, or conduit to reduce the risk of damage, wear, or snagging during movement.



D-line

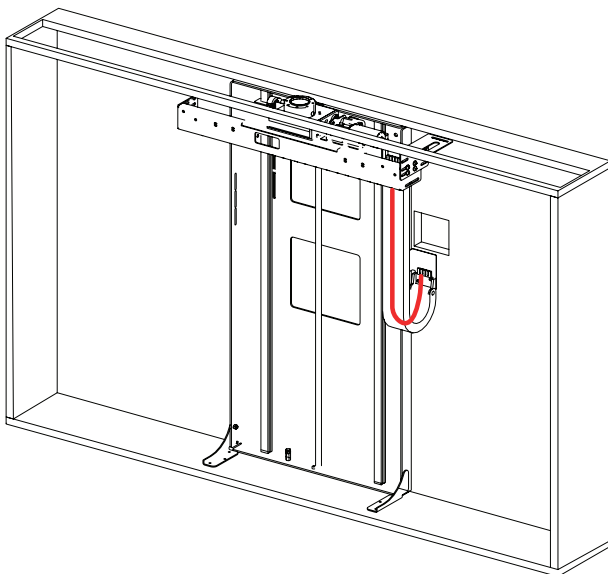


Spiral wrap

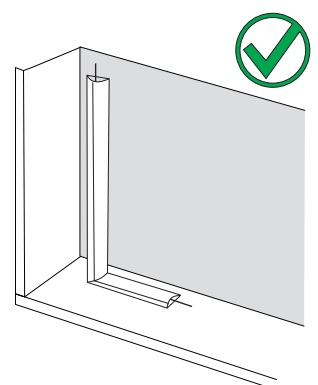
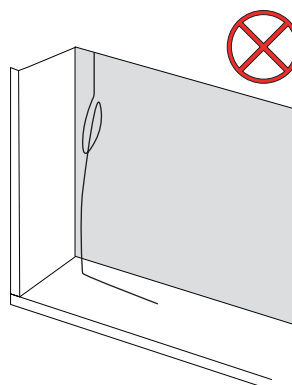


Cable Clips

Considerations



Use defined routes and keep clear of moving parts.



Secure all cables and protect them in conduit (where possible).



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Saturday & Sunday - Closed

