## TECH SHEET WALL VERTICAL ADJUSTMENT BASE V2 (LOW PROFILE - GERRY)

## What is the Vertical Adjustment of a DIRTT Wall with Base V2 (Gerry)?

DIRTT Base V1 has an overall range of 1 1/2" (38.1mm) adjustment to deal with undulations in floor level.

Also see "Vertical Wall Adjustment V1 Base" document for full range of adjustment for the Base V1 (Boxcar) as it differs from the Base V2 (Low Profile - Gerry) adjustment.

### **Rules of Measurement and Installation**

The wall height "as specified in ICE" automatically adjusts the frame height to allow a  $\frac{1}{2}$ " (13mm) gap between the top of the frame and the underside of the ceiling to which it is attaching; this allows for the preferred ceiling trim detail. Levelers in the bottoms of the frame structure then can be adjusted in and out independently to deal with unlevel floor conditions.

## Factory Preset for Glass Walls and Solid Walls or Lower Solid Wall Stack Frame Segments in Seismic Applications

The levelers of the frame are adjusted to set the bottom of solid tiles or horizontal glass extrusions to be 1" (25mm) above the finished floor. This is called the "Factory Preset".

From the "Factory Preset", the walls can be made shorter by  $\frac{3}{2}$ " (10mm) to deal with subtle rises in floor level and made taller by 1  $\frac{1}{2}$ " (28.6mm) to deal with dips in floor level. See **Figure 3**.

### EXAMPLE

If ceiling height is set at 8'-0" (2438mm) in ICE, Base V2 walls can accommodate ceiling heights in the range of 7'-11 5%" (2429mm) to 8'-1 1%" (2467mm). See **Figure 1**.



Figure 1. Factory Preset for Glass Walls and Solid Walls or Lower Solid Wall Stack Frame Segments in Seismic Applications

# Factory Preset for Levelers in Solid Wall or Lower Solid Wall Stack Frame Segments in Non-Seismic Application

Levelers are bottomed out to zero before being installed into their respective frames. Frame size will be based on original design parameters; however, the Levelers will be bottomed out. This means that frame height on these wall types can only be increased when originally installed. See **Figure 2**.

### Additional Adjustments

By substituting the mid drive collar of the standard leveler assembly with an *Extended Leveler Drive* Collar, the walls can be made taller then the standard leveling range by  $1 \frac{1}{2}$ " (38.1mm) to deal with deeper dips in floor level. See **Figure 4**.



Figure 2. Factory Preset for Levelers in Solid Wall or Lower Solid Wall Stack Frame Segments in Non-Seismic Application

## **Critical Dimensions**

Part of planning your product design height is obtaining the critical site dimensions and understanding how to apply them. DIRTT wall heights should be based on actual install conditions; the walls are meant to be installed on top of finished floors, and to underside of finished ceilings (lowest surface). If finished materials are not installed when site survey is conducted, they should be dimensionally factored into ceiling height calculations.

- If tying into a grid ceiling with lay-in tegular tiles; the underside of the tiles should be used as they are usually 1/4" (6mm) below grid.
- If standard-lay tiles are flush; the underside of the grid should be used.
- If carpet is not in place when site survey is conducted, ask for finished carpet thickness to deduct from the measurements taken. A generic thickness of 3%" (9.5mm) has been used in the past.

Failure to account for finishes will affect fit of DIRTT walls.

#### Site Survey

A thorough site survey must be conducted utilizing a laser level (prior to order entry) to determine the overall deviation in floor level and ensure the wall height entered in ICE can accommodate all deviations.

As there is less adjustment to make frames shorter; the high point of the floor should be used as the critical floor to ceiling dimension to determine the design ceiling height.



Figure 3. Leveler on Glass Wall Frame showing Wall Base V2 Adjustment Range and Height above Finish Floor. Note Base Trim shown as tear away.

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Figure 4. Leveler with Extended Drive Collar on Glass Wall Frame showing Wall Base Adjustment Range and Height above Finish Floor. Note Extended Base Trim shown.

See also the DIRTT Installation Guide documents for Base V1 and V2 posted on the website.

#### TECHTIP

When walls with V2 Low Profile Base are adjusted beyond the maximum  $1 \frac{1}{8}$ " (28.6mm) range of the standard levler, and the Extended Drive Collar is utilized, extended base trim will also be required.

### Cheat

DIRTT wall height would be 'cheated' only if a greater range of adjustability with a single specified wall height is desired in lieu of ordering walls at multiple ceiling heights. It is more beneficial to the client to order all product at a single ceiling height to optimize re-use of existing components in reconfigurations.

If you have a range of floor undulations that exceed  $1 \frac{1}{2}$ " (38.1 mm) in variance ; you can gain  $\frac{3}{2}$ " (9.5 mm) in vertical adjustment by taking the ceiling height measurement at the high point in the floor (attained by site survey) and adding  $\frac{3}{2}$ " (9.5 mm) to it. This is the known critical dimension that the frames can be lowered by, so it is imperative that errors are not made in determining the high point in the floor. This means the levelers must be bottomed out at the high point in the floor when installed. This 'cheat' will enable DIRTT walls to cover a range of  $1\frac{7}{2}$ " (47.6 mm) floor deviance over the area of installation.

At no point can the frame be lowered more than 3/8" (9.5mm) resulting in the bottom of Gerry at 5/8" (15.9mm) AFF.

Note: Solid Core Wood Barn Doors will need to be cut to height in 'cheated' locations.