

Schluter®-TROBA-LEVEL



INNOVATIVE SOLUTIONS FOR CERAMIC AND STONE TILE

EXTERIOR TILE AND PAVER SUPPORT SYSTEM

Application and Function

Schluter®-TROBA-LEVEL paver support system enables the installation of self-supporting paver tiles for exterior applications. System components can be combined in various configurations to compensate for sloped substrates up to 5%, precisely level corners of adjacent paver tiles, and allow flush installation of pavers with different thicknesses. The elevated assembly provides easy access to the substrate, as well as drainage and ventilation. Due to the open joints between the tiles and pavers, surface water can freely drain on to the substrate and, if fitted, into the drainage system beneath.

Schluter®-TROBA-LEVEL-LV 3 stackable paver supports (height = 1/8" [3 mm]) are used for very low assembly heights, and feature 1/8" (3 mm) joint spacers to provide consistent joint widths throughout the installation. TROBA-LEVEL-LV 3 can also be used in combination with TROBA-LEVEL-PL 10 and TROBA-LEVEL-PLA 30 for additional load distribution.

Schluter®-TROBA-LEVEL-PL 10 stackable paver supports (height = 3/8" [10 mm]) are used for low assembly heights, and feature 1/8" (3 mm) joint spacers to provide consistent joint widths throughout the installation. Supports can be stacked to a maximum height of 7-7/8" (200 mm).

Schluter®-TROBA-LEVEL-PLA 30 stackable paver support extensions (height = 1-3/16" [30 mm]) can be inserted between two TROBA-LEVEL-PL 10 for assembly heights of 2" (50 mm) or greater.

Schluter®-TROBA-LEVEL-PLV 60 pre-assembled paver supports can be continuously adjusted from 2-3/8" to 5-1/8" (60 to 130 mm) by turning the height adjustment ring while



Schluter®-TROBA-LEVEL-LV 3



Schluter®-TROBA-LEVEL-PLV 60



Schluter®-TROBA-LEVEL-PL 10



Schluter®-TROBA-LEVEL-PLA 70



Schluter®-TROBA-LEVEL-PLA 30



Schluter®-TROBA-LEVEL-AP 1

holding the top and base plate stationary. The thread features a vibration-lock mechanism to protect against accidental loosening. The TROBA-LEVEL-PLV 60 incorporates 1/8" (3 mm) joint spacers and perimeter spacer.



Schluter®-TROBA-LEVEL-PLS 6

Schluter®-TROBA-LEVEL

Item	Height	Support Diameter/Area	Material	Max. Stacking Height
Schluter®-TROBA-LEVEL-LV 3 Tile and paver support	1/8" (3 mm)	7-7/8" (200 mm)	PP	1/4" (6 mm)
Schluter®-TROBA-LEVEL-PL 10 Tile and paver support	3/8" (10 mm)	4-3/4" (120 mm)	PE	7-7/8" (200 mm)
Schluter®-TROBA-LEVEL-PLA 30 Tile and paver support extension	1-3/16" (30 mm)	4-3/4" (120 mm)	PE	7-7/8" (200 mm)
Schluter®-TROBA-LEVEL-PLV 60 Height adjustable tile and paver support	2-3/8 to 5-1/8" (60 to 130 mm)	7-7/8" (200 mm)	PP	15" (381 mm)
Schluter®-TROBA-LEVEL-PLA 70 Tile and paver support extension	2-3/4" (70 mm)	-	PE	15" (381 mm)
Schluter®-TROBA-LEVEL-AP 1 Leveling shim	1/32" (1 mm)	-	PE	3/8" (10 mm)
Schluter®-TROBA-LEVEL-PLS 6 Protective pad	1/4" (6 mm)	10-1/4" x 10-1/4" (260 x 260 mm)	Rubber/ Aluminum	-

Schluter®-TROBA-LEVEL-PLA 70 adjustable paver support extension (height = 2-3/4" [70 mm]) can be integrated with TROBA-LEVEL-PLV 60. Multiple TROBA-LEVEL-PLA 70 units can be used to reach the desired height up to a recommend maximum of 15" (381 mm). The thread features a vibration-lock mechanism to protect against accidental loosening.

Schluter®-TROBA-LEVEL-AP 1 leveling shims (height = 1/32" [1 mm]) are used to compensate for variations in substrate and/or paver thickness by adjusting the corners of each paver tile. TROBA-LEVEL-AP 1 are designed to lock between the joint spacer tabs of the TROBA-LEVEL-LV 3/-PL 10/-PLV 60 paver supports and can be stacked up to 10 shims high.

Schluter®-TROBA-LEVEL-PLS 6 (height = 1/4" [6 mm]) protective pads provide additional protection for the waterproofing membrane under the base plates of TROBA-LEVEL-LV 3, TROBA-LEVEL-PL 10, or TROBA-LEVEL-PLV 60 paver supports. The TROBA-LEVEL-PLS 6 protective pads feature four perforated tabs designed to maintain the position of the paver support on the pad. For installations over PVC waterproofing, the aluminum separating layer of the protective support pads must be installed facedown.

Material Properties and Areas of Application

Schluter®-TROBA-LEVEL pedestal system products are manufactured using polyethylene (PE) or polypropylene (PP) materials. They are serviceable in temperatures from -40°F to 131°F (-40°C to 55°C). Schluter®-TROBA-LEVEL-PLS 6 protective pad is manufactured using granulated rubber with an aluminum

lining laminated on one side. All products are UV-resistant, do not rot, recyclable, physiologically harmless and compatible with bitumen.

Installation

The Schluter®-TROBA-LEVEL System and all other installation materials must be installed in accordance with these installation requirements, all applicable building codes and/or standards, industry standard guidelines, and the other manufacturer's installation instructions. Schluter®-Systems' written installation requirements shall have precedence over referenced industry standard guidelines and paver manufacturer's installation instructions insofar as such referenced information may contain conflicting or overlapping requirements. All building materials, including the type, thickness, and format of the pavers, must be suitable for the intended application.

Follow the tile paver manufacturer's specifications regarding flexural strength and load restrictions of tile pavers. Depending on the material and format of the tile pavers, additional paver supports may be required. Please use the TROBA-LEVEL Estimator tool on our website to estimate the number of supports and tile pavers (www.schluter.com/troba-level-estimator).

All substrates must be structurally capable of supporting the anticipated loads. Install extra paver supports if heavy items (e.g., hot tubs, planters, etc.) will be placed on top of the tile paver surface.

Insulation (e.g., foam plastic such as XPS or EPS) must have a compressive strength of 60 psi or greater for use under the Schluter®-TROBA-LEVEL paver supports.

Schluter®-TROBA-LEVEL

Paver Support Configuration	*Load Capacity (lb)
	73° F
PLV 60	1,417
PLV 60 + PLA70	1,383
PL10	1,767
PL10 + PLA30	1,359

*Design professional (e.g., architect, engineer, etc.) and general contractor must account for the expected dead and live loads including allowable loads during construction and maintenance. Note that elevated temperature will reduce load bearing capacity.

Parapet walls, concrete dividers or other perimeter restraints are required and must be capable of resisting lateral forces. Movement in the assembly may not exceed 1/8" (3 mm).

Prior to installation, check all perimeter containment surfaces for square and flatness. Adjust tile paver layout so that the 1/8" (3 mm) perimeter joint spacer remains in contact with the perimeter containment.

The roofing membrane must be sufficiently sloped (1.5 to 2.0%) to provide positive drainage.

Schluter®-TROBA-LEVEL paver supports may be installed directly on top of roofing membrane. To provide additional protection for the roofing membrane, Schluter®-TROBA-LEVEL-PLS 6 protective pads can be used under the Schluter®-TROBA-LEVEL paver supports.

To mitigate the collection of debris below the paver assembly, it is recommended to start with a paver support height of at least 3/8" (10 mm).

Surfaces to receive pedestals must be clean from any dirt or debris.

1. Start the paver support installation at the highest point of the substrate to ensure adequate clearance for pedestal placement.

2. **PERIMETER APPLICATION** - *Assembly heights less than 2-3/8" (60 mm)*

For installations at edges or in corners, TROBA-LEVEL-LV 3 and TROBA-LEVEL-PL 10 paver supports can be cut in halves and stacked to obtain the desired starting height. Score the paver support with a utility knife and bend to snap in half.

Note: When stacking halves of the TROBA-LEVEL-PL 10 for perimeter applications:

- Determine how the paver supports fit together prior to cutting. Pay close attention to the 90° offset of each consecutive paver support to ensure that a spacer tab remains between the paver tile and the perimeter structure or wall.
- When TROBA-LEVEL-PL 10 paver supports are stacked to support a single paver tile edge (not at a joint between paver tiles), some spacer tabs may need to be trimmed or removed from the top two paver supports.
- The minimum width of a tile paver must be 3-3/8" (85 mm) when using TROBA-LEVEL-PL 10 stackable paver supports.
- Maximum stackable height of 7-7/8" (200 mm).

3. **PERIMETER APPLICATION** - *Assembly heights greater than 2-3/8" (60 mm)*

For installations at edges or in corners, TROBA-LEVEL-PLV 60 adjustable paver supports can be used by cutting the base plate at one of the pre-marked lines on the underside to allow the support to be positioned closer to the wall. On the top plate of the TROBA-LEVEL-PLV 60, fold the wall spacer to the upright position. Remove any unnecessary joint spacer tabs by tapping sideways with a hammer. The minimum tile paver width is 3-3/8" (85 mm).

4. To level the pavers, use a spirit level to determine the number of TROBA-LEVEL-AP 1 levelling shims (1/32" [1 mm])

required to bring the paver to the desired height.

5. TROBA-LEVEL-LV 3 and TROBA-LEVEL-PL 10 paver supports positioned away from the perimeter can be stacked with a 90° offset to obtain the desired height.

6. For an assembly height of 2" (50 mm) or greater, TROBA-LEVEL-PLA 30 stackable paver support extensions (1-3/16" [30 mm]) are used between two TROBA-LEVEL-PL 10 stackable paver supports.

7. For assembly heights of 5-1/8" – 15" (130 mm - 381 mm), install TROBA-LEVEL-PLA 70 adjustable paver support extensions (2-3/4" [70 mm]). To install, completely screw the extensions into the bottom plates of TROBA-LEVEL-PLV 60, or into each other when multiple TROBA-LEVEL-PLA 70 extensions are required.

8. TROBA-LEVEL-PL 10 and TROBA-LEVEL-PLA 30 stackable paver supports can be stacked on top of the TROBA-LEVEL-PLV 60 adjustable paver support.

9. For additional protection of a waterproofing layer (i.e. roofing membrane), TROBA-LEVEL-PLS 6 protective pads (1/4" [6 mm]) can be installed under the base plates of TROBA-LEVEL-PLV 60 or TROBA-LEVEL-LV 3 paver supports. For installations over PVC waterproofing, the aluminum separating layer of the protective support pads must be installed facedown. The four perforated tabs of TROBA-LEVEL-PLS 6 are lifted over the edge of TROBA-LEVEL-LV 3 and TROBA-LEVEL-PLV 60 to maintain the position of the paver support on the pad. If using TROBA-LEVEL-PL 10 stackable paver supports, these must be placed in the center of the pads.

Maintenance

Due to natural expansion and contraction of substrate materials, portions of the substrate under the TROBA-LEVEL paver support assembly may settle or rise causing unevenness in the finished floor surface. In this case routine maintenance must be performed to correct the uneven tile pavers. Failure to realign and correct uneven tile pavers can cause a tripping hazard. Check perimeter containment walls are structurally sound and prevents tile movement.



Product Item Numbers



Schluter®-TROBA-LEVEL-LV 3

Item No.	Description	Height	Packaging
TLLV3/10	Tile and paver support	1/8" - 3 mm	10/box



Schluter®-TROBA-LEVEL-PL 10

Item No.	Description	Height	Packaging
TLPL10/10	Tile and paver support	3/8" - 10 mm	10/box



Schluter®-TROBA-LEVEL-PLA 30

Item No.	Description	Height	Packaging
TLPLA30/10	Tile and paver support extension	1-3/16" - 30 mm	10/box



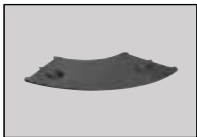
Schluter®-TROBA-LEVEL-PLV 60

Item No.	Description	Height	Packaging
TLPLV60/6	Height adjustable tile and paver support	2 3/8" - 5 1/8" - 60 - 130 mm	6/box



Schluter®-TROBA-LEVEL-PLA 70

Item No.	Description	Height	Packaging
TLPLA70/6	Tile and paver support extension	2 3/4" - 70 mm	6/box



Schluter®-TROBA-LEVEL-AP 1

Item No.	Description	Height	Packaging
TLAP1	Leveling shim	1/32" - 1 mm	250/box



Schluter®-TROBA-LEVEL-PLS 6

Item No.	Description	Height	Packaging
TLPLS6	Protective pad	1/4" - 6 mm	10/box

Schluter®-TROBA-LEVEL 3-Year Limited Warranty

LIMITED WARRANTY COVERAGE: Subject to the conditions and limitations as stated in this **Schluter®-TROBA-LEVEL 3-Year Limited Warranty** (the “**Limited Warranty**”), Schluter Systems warrants that its TROBA-LEVEL-LV 3 (TLV3/10), TROBA-LEVEL-PL 10 (TLPL10/10), TROBA-LEVEL-PLA 30 (TLPLA30/10), TROBA-LEVEL-PLV 60 (TLPLV60/6), TROBA-LEVEL-PLA 70 (TLPLA70/6), TROBA-LEVEL-AP 1 (TLAP1), and TROBA-LEVEL-PLS 6 (TLPLS6) (hereafter collectively referred to as the “**Products**”) will be free from manufacturing defects and will perform as described in the applicable Schluter®-TROBA-LEVEL technical data sheet (the “**Written Materials**”) for a period of three (3) years from the date of purchase when installed and used in accordance with the terms and conditions of the Written Materials and industry standard guidelines that are not in conflict with the Written Materials in effect at the time of installation.

For the purposes of this Limited Warranty, “Owner” is defined as the original end user of the property in which the Products are installed.

This Limited Warranty is only applicable to installations in the United States of America and Canada. Schluter Systems is not responsible or liable under any circumstances for determining the suitability of the Products for the Owner’s intended purpose. It is the responsibility of the Owner to consult with an experienced and professional installer to ensure the suitability of the Products, substrate and all building materials in the installation and that the Written Materials are followed properly.

RESOLUTION: If the Products are installed and used in accordance with the terms and conditions as described hereinabove and such Products are proven defective within the applicable warranty term, the Owner’s exclusive remedy and the sole obligation of Schluter Systems, at its election, shall be to repair or replace the Products, and does not cover the cost of transport, and installation.

EXCLUSIONS FROM COVERAGE: This Limited Warranty excludes and in no event shall Schluter Systems have any liability for any indirect, special, incidental, punitive, exemplary, or consequential damages, including lost profits, arising out of or otherwise connected to the failure of the Products, regardless of any strict liability or active or passive negligence of Schluter Systems, and regardless of legal theory, whether in contract, tort, extra-contractual or other. This Limited Warranty further excludes any loss or damage arising out of or otherwise connected to: acts of war, terrorism, fire, explosion, natural disaster, acts of God, any failure to comply with the Written Materials, inadequate substrate, improper preparation or other failure of subfloor/substrate, faulty or negligent penetration of the Products or subfloor/substrate, intentional acts of destruction, structural failure, misuse of or failure to maintain the Products, normal wear and tear, scratches, dents, corrosion or discoloration (whether caused by excessive heat, chemical cleaning products, abrasive agents or otherwise), variations of texture, color or shade from those on product samples, packaging materials or other marketing materials, or other causes unrelated to the Products (e.g. excess point loading).

This Limited Warranty is conditioned and will be considered null and void and Schluter Systems will have the right to refuse any claims if: (a) the Products have been improperly stored or installed, (b) any component comprising a Schluter® TROBA-LEVEL System has been altered or otherwise modified in any way, or (c) the Products are subject to abusive or abnormal use, lack of maintenance, or used in a manner other than that for which the Products were designed or in any way contrary to the Written Materials.

DISCLAIMER: There are no warranties beyond this expressed warranty as stated herein. To the extent permitted by law, all other warranties, representations or conditions, expressed or implied, are hereby disclaimed and excluded, including but not limited to the implied warranties of **MERCHANTABILITY** or **FITNESS FOR A PARTICULAR PURPOSE** (as limited to such purposes as described in the Written Materials) or arising from a course of dealing, usage of trade or otherwise by law. ANY IMPLIED WARRANTIES ARISING BY OPERATION OF LAW ARE LIMITED IN DURATION TO THE TERM OF THIS LIMITED WARRANTY. NO REPRESENTATION, PROMISE, AFFIRMATION OR STATEMENT BY ANY EMPLOYEE OR AGENT OF SCHLUTER SYSTEMS WILL BE ENFORCEABLE AGAINST SCHLUTER SYSTEMS UNLESS IT IS SPECIFICALLY INCLUDED IN THIS LIMITED WARRANTY OR AUTHORIZED IN WRITING BY THE SCHLUTER SYSTEMS TECHNICAL SERVICES DIRECTOR. This Limited Warranty is given in lieu of any other warranty, whether expressed or implied. The remedies contained herein are the only remedies available for breach of this Limited Warranty. Schluter Systems excludes and in no event shall have any liability for any indirect, special, incidental, punitive, exemplary, or consequential damages, including lost profits, arising out of or otherwise connected to failure of the Products. This Limited Warranty extends only to the Owner and is not transferable or assignable unless authorized by written agreement and signed by the Schluter Systems Technical Services Director or otherwise prohibited by specific state or provincial law. This Limited Warranty gives you specific legal rights; some states and provinces do not allow disclaimers or other restrictions of implied warranties; some of the above disclaimers may not apply to you. **No changes or modifications of any terms or conditions of this Limited Warranty are permitted unless duly authorized in writing by the Schluter Systems Technical Services Director.** This Limited Warranty shall supersede and replace any and all prior oral or written warranties, agreements, or other representations made by or on behalf of Schluter Systems relative to the Products or the application of the Products and shall apply to any installation occurring on or after June 1, 2019.

For the most current information and materials regarding Schluter Systems warranties and programs, please visit https://www.schluter.com/schluter-us/en_US/downloadfiles.

MAKING A CLAIM: To make a claim under this Limited Warranty, the Owner must provide Schluter Systems² with written notice within thirty (30) days of any alleged defect in the Products covered by this Limited Warranty, together with date and proof of purchase of such Products and/or all of its components and name and address of all installers and all invoices related to the original installation, failing which this Limited Warranty shall have no legal effect. Schluter Systems reserves the right at its election and as a condition of this Limited Warranty to inspect the alleged failed and/or defective Products.

All U.S. Claims shall be sent to:

Schluter Systems L.P.
Attn: Warranty Claims Dept.
194 Pleasant Ridge Road
Plattsburgh, NY 12901-5841

All Canadian Claims shall be sent to:

Schluter Systems (Canada), Inc.
Attn: Warranty Claims Dept.
21100 chemin Ste-Marie
Ste-Anne-de-Bellevue, QC H9X 3Y8

¹If there are any conflicting terms between any Written Materials, the most recently updated document shall be deemed to control.

²This Limited Warranty is limited to sales of the Products made in and intended for use in the United States and Canada. For the purposes of this Limited Warranty, Schluter Systems L.P. shall offer warranty coverage to Owners located in the United States, and Schluter Systems (Canada) Inc. shall offer warranty coverage to Owners located in Canada.

