

SCHLUTER®-KERDI-BOARD-SNLT SHOWER NICHE WITH LIPROTEC LED LIGHTING



INNOVATIVE SOLUTIONS FOR CERAMIC AND STONE TILE

SHOWER NICHE WITH LIPROTEC LED LIGHTING

Schluter®-LIPROTEC illuminated profile technology is now available for Schluter®-KERDI-BOARD niches, making it easier than ever to add warm, diffused lighting to your shower. The simple 3 step system is comprised of the Schluter®-KERDI-BOARD-SNLT shower niche with integrated LIPROTEC lighting technology, the power supply, and cables specifically designed to ensure a watertight connection.

Application and Function

Niches

Schluter®-KERDI-BOARD-SNLT is prefabricated shower niche made of KERDI-BOARD that incorporates a mounting profile with a diffused LED light strip. It features a pre-installed waterproof connection box to ensure the electrical connection is codecompliant. The KERDI-BOARD-SNLT niche can be installed in both KERDI and KERDI-BOARD wall assemblies. The shower niche features a 1/2" (12.5 mm) -thick by 2" (50 mm) -wide integrated bonding flange and is available in various sizes, with options for vertical or horizontal installation. The mounting profile is made of anodized aluminum with satin finish (AE). It is sized to fit along the top of the niche and features a cut out designed to pass the cable. The LED light strip is encased in a silicone tube that provides an evenly diffused line of warm white light measuring 3000K and nests into the mounting profile.

Each niche kit niche includes:

- A stainless steel connection box and cover which are inserted into the waterproofed and factory-assembled plastic connection box, ensuring a code-compliant LED system.
- A self-adhesive patch used for proper thin-set mortar adhesion and to prevent mortar from entering the connection box. The patch is not intended for waterproofing.



- A KERDI-BAND frame used to waterproof the connection between the niche and the surrounding walls.
- KERDI-BOARD-ZS/-ZT screws and washers used to fasten the niche to the wall framing.

Cables

Schluter®-LIPROTEC-CW connection cables are rated for in-wall installation - no conduit required. The cable features a preinstalled waterproof snap-in gland for a secure connection to the top of the niche, and connectors to attach the LED strip.

Drivers

Schluter®-LIPROTEC-ECX is an all-in-one LED power supply and in-wall dimmer switch. It offers smooth, even dimming with a dimming range of 5% to 100%. LIPROTEC-ECX can control multiple KERDI-BOARD-SNLT niches (up to 60 watts). Additionally, it includes three interchangeable face plates to match most decors.

Schluter®-LIPROTEC-ECD is an in-line dimmable driver that is hard wired into your electrical. It is compatible with a range of popular dimmer switches, allowing you to have matching light switches throughout your bathroom. The available dimming range is



5% to 100% and can control multiple KERDI-BOARD-SNLT niches (up to 24 watts). The LIPROTEC-ECD includes metal enclosure and must be installed in an accessible location, such as a closet or vanity. A compatible dimmer switch must be purchased separately, refer to the compatibility list on schluter.com.

Material Properties and Areas of Application

KERDI-BOARD-SNLT is made from extruded polystyrene foam, with a cement-free reinforcement layer laminated to both sides and an anchoring fleece webbing. The surface of the board has gridlines consisting of 3/8" x 3/8" (10 mm x 10 mm) squares printed on one side.

KERDI-BOARD-SNLT is waterproof and vapor-retardant and can withstand all chemical stresses that typically occur in conjunction with ceramic tile coverings. KERDI-BOARD-SNLT may be used in bonded waterproofing assemblies where required.

Mounting profiles are resistant to most chemicals encountered in tiled environments. In special cases, the suitability of a proposed type of material must be verified based on the anticipated chemical, mechanical, and/or other stresses.

Exceptions and special considerations are listed below.

Anodized aluminum profiles feature an anodized layer that retains a uniform appearance during normal use. The surface is susceptible to scratching and wear and may be damaged by grout or setting material. Therefore, these materials must be removed immediately.

LIPROTEC-ECX fits in a standard electrical box and eliminates compatibility issues between drivers and dimmer switches. It is a better option for more simplified installations.

LIPROTEC-ECD dimmable driver will, ideally, be hidden from view. It must be installed in an accessible location such as a closet, cabinet, or vanity. Do not install closer than 2" (50 mm) to cabinet walls. Do not install in a compartment smaller than: L17-1/2" x W8-1/2" x H4-1/4" (L44.5 cm x W21.5 cm x H11.5 cm). Orientation is not critical. Suitable for use in dry/damp locations.

LIPROTEC LED strips are designed for easy cleaning.

Note: Avoid contact with insulation and areas exposed to temperature fluctuations as these conditions will affect the lifespan of the driver.

The length of the LIPROTEC-CW cable is dependent upon where the power supply/ driver and niche are located. The install location of the power supply/driver must first be established. Once the location is selected, it is necessary to determine how the cables are to be run from the power supply/driver to the niche. That will define the length of CW cable required for the installation. The cable can be shortened when necessary. The Schluter LIPROTEC-CW cable can be extended if you do not have enough length to reach the LED drivers. The connection must be enclosed and accessible. Our recommendation is to verify and consult with your local electrician, according to the electrical and building codes effective in your region, as to the appropriate wire and methods.

12.1 Schluter®-KERDI-BOARD		
Property	Method	Value
Water vapor permeance	ASTM E961	0.36 perms - 1/2" (12.5 mm)
Thermal resistance (R-value)	ASTM C518	R 9.1 – 2" <i>(50 mm)</i> R 2.2 – 1/2" <i>(12.5 mm)</i> R 0.9 – 3/16" <i>(5 mm)</i>
Service temperature range		-58°F to 158°F (-50°C to 70°C)
Flame spread/smoke developed	ASTM E84 CAN/ULC S102.2	Pass ² Pass ³
Thermal barrier evaluation	NFPA 286	Pass ^{2,4}

¹Using the desiccant method at 100°F (38°C) and 90% RH

Installation

For complete installation guidelines and warranty criteria, please contact Schluter-Systems (USA: 800-472-4588; Canada: 800-667-8746) to receive a copy of the Schluter®-KERDI-BOAD-SNLT Installation Instructions and Planning Guide. To download PDF versions of these documents or to view the installation video online, please visit schluter.com.

This product must be installed by a qualified person in accordance with the KERDI-BOARD-SNLT installation instructions and with the Canadian Electrical Code Part I (Canada) or the National Electrical Code (U.S.) as applicable. All electric connections must be made by a qualified person, according to the electrical and building codes effective in your region.

Testing and Certifications

Cable

- UL13 (US) Power-limited Circuit Cable, CL2, 80C, 300V
- CSA-C22.2 No. 214 (Canada) Communications Cable, CM, FT4, 75C, 300V

Drivers

- UL8750 (US), CSA-C22.2 No. 250.13 (Canada) Light-emitting-diode drivers (LIPROTEC-ECD Driver)
- UL2108 (US), CSA-C22.2 No. 250.2 (Canada) Low-voltage Lighting Systems, Power Units, Luminaires and Fittings (LIPROTEC-ECD and LIPROTEC-ECX Drivers)

LED Kit

- UL2108 (US), CSA-C22.2 No. 250.2 (Canada) Low-voltage Lighting Systems, Power Units, Luminaires and Fittings
- Suitable for Wet Locations IP 67 Rating

Maintenance

LIPROTEC LEDs and components require no special maintenance or care and are resistant to mold and fungi. Clean profiles periodically using pH neutral cleaning agents. All cleaning agents must be free of hydrochloric acid, hydrofluoric acid, and chlorides. Oxidation films on aluminum may be removed with a conventional polishing agent, but the film will form again. In the case of anodized aluminum, do not use abrasive cleaning agents.

²Per International Building Code Requirements, contact Schluter®-Systems for more information

³ Specific building categories, contact Schluter®-Systems for more information

⁴Porcelain tile used as thermal barrier over 1/2" (12.5 mm) -thick KERDI-BOARD on wood framing

LIPROTEC-CW Cable	
Specification	Value
Туре	(UL) CL2 (Class 2 low voltage cable)
Rating	Rated for in-wall installation – no conduit required
Voltage Rating	300V
Temperature Rating	c(UL) 75°C / CSA 80°C
CSA Fire Rating	FT4
Listings	UL, cUL, CSA (UL E530823)
Conductors	(2) 20 AWG (Red and Black)
Outer Jacket	WHITE PVC JACKETING, UL13, Ø4.3mm
Wire Outlet	5/8" SNAP-IN Gland, IP65, Torqued to 35 IN-LBS (4 N-m)
	WATERPROOF
End Connector	MIZU-P25,RECEPTACLE HOUSING, 2
	CIRCUIT, BLACK
Driver End	Striped and tinned

LIPROTEC-ECD Dimmable LED I	Driver	
Specification	Value	
Input Voltage	100-130 VAC	
Input Frequency (Hz)	50~60Hz	
DC Output Voltage	24 VDC ±3%	
DC Output Current	1A	
Max Load Watts	24W	
Efficiency at 120V with Rated Load	≥81%	
Power Factor at 120V with Rated Load	>0.58	
Start Up Time Without Dimmer	Cold start ≤500mS	
PK - PK Output Current Ripple	≤100mA	
Max Operating Temp	80°C	
Dimmer Compatability*	Triac/ELV	
Dimming %	≤5%	
Minimum Load	0	
Approved Environmental Locations	Indoor / dry location	
Approved Relative Humidity	10~95%RH (Non-condensing)	
Audible Noise Level (Without Dimmer)	≤24 dBA at 1 m (3.28 ft)	
Inrush Current Limit at 120V	<20A	
Surge Protection	Yes	
Over Current Protection Present	<1.25A	
Short Circuit Protection Present	Hiccup mode, Auto Recovery	
Over Voltage Protection Present	Yes	
Thermal Protection Present	Hiccup mode, Auto Recovery	
Warranty With Case Temp < 80°C	5-year	
FCC Compliant	Yes. Complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules	
ROHS Compliant	Yes	
UL Recognized Driver	Yes (UL E530824)	
Listed Power Supply Combination	Yes. cULus Listed (US & Canada) per UL2108 Low Voltage Lighting System UL E530823	

^{*}A compatible dimmer switch must be purchased separately, refer to the compatibility list on schluter.com.

LIPROTEC-ECX LED Driver and I	Dimmer		
Specification	Value		
Input Voltage	108 ~ 132 VAC		
Input Frequency (Hz)	47 ~ 63Hz		
DC Output Voltage	24 VDC ±3%		
Output Voltage Adjustment	+1 VDC		
DC Output Current	2.5A		
Max Load Watts	60W		
Efficiency at 120V with Rated Load	≥91%		
Power Factor at 120V with Rated Load	>.9		
Start Up Time	The main supply output voltages remain within the regulation limit of +/- 3%.		
Totoal Harmonic Distortion (THD)	≤20% at 120VAC 60Hz max load.Tested to comply in accordance with IEC 61000-3-2.		
Output Ripple Current	≤20% of the rated output current @ 120 VAC max load.		
Maximum Operating Temperature	0°C to 40°C		
Stand-by Power	≤0.5W		
Leakage Current	<500μA @ 120 VAC		
Dimming %	≤5%		
Minimum Load	0		
Approved Environmental Locations	Indoor / dry location		
Approved Relative Humidity	8~90% RH (Non-condensing)		
Audible Noise Level (Without Dimmer)	≤22 dBA at 1 ft (30 cm)		
Inrush Current Limit at 120V	Meets NEMA-410 requirement at any nominal input full sine wave voltage and maximum load at 25°C.		
Surge/Transient	Tested to meet transients defined in IEC 6100-4-4,level 3 & IEC 6100-4-5, level 3.		
Short Circuit Protection Present	Hiccup mode, Auto Recovery		
Over Voltage Protection Present	Yes		
Thermal Protection Present	Hiccup mode, Auto Recovery		
Warranty	5-year		
FCC Compliant	Yes, complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules		
ROHS Compliant	Yes		
UL Recognized Driver	Yes (UL E530824)		
Listed Power Supply Combination	Yes, cULus Listed (US & Canada) per UL2108 Low Voltage Lighting System UL E530823		
Compliance	Conforms to NEC Code 725.136 (See Mechanical Diagram): Class 1 and Class 2 circuit in same enclosure must be separated by a barrier (partition) unless Class 2 circuit conductors are install in accordance with 725.41 Class 1 Circuits.		

LIPROTEC LED Specifications			
LED length	11-13/16" (300 mm)	19-13/16" (503 mm)	27-13/16" (706 mm)
Brightness	118 lumens	230 lumens	303 lumens
Energy used	1.7 watts	3.0 watts	4.0 watts
Voltage	24 VDC	24 VDC	24 VDC
Color temperature	3000K	3000K	3000K
IP rating	IP 67	IP 67	IP 67
CRI	90+	90+	90+
Diffusion	Fully Diffused	Fully Diffused	Fully Diffused
Dimmable	Yes	Yes	Yes
Certification	cULus Listed - UL E530823	cULus Listed - UL E530823	cULus Listed - UL E530823
Tube material	Silicone (Bacteria resistant per ISO 22196)	Silicone (Bacteria resistant per ISO 22196)	Silicone (Bacteria resistant per ISO 22196)

Product Item Numbers



Schluter®-KERDI-BOARD-SNLT - VERTICAL			Niche with white LED
Item No.	Height	Width	Depth
KB 12 SNLT 1 WWF	305 mm - 12"	305 mm - 12"	89 mm - 3-1/2"
KB 12 SNLT 2 WWF	508 mm - 20"	305 mm - 12"	89 mm - 3-1/2"
KB 12 SNLT 3 WWF	711 mm - 28"	305 mm - 12"	89 mm - 3-1/2"





Schluter®-KERDI-BOARD-SNLT - HORIZONTAL			Niche with white LED
Item No.	Height	Width	Depth
KB 12 SNLT 4 WWF	305 mm - 12"	508 mm - 20"	89 mm - 3-1/2"
KB 12 SNLT 5 WWF	305 mm - 12"	711 mm - 28"	89 mm - 3-1/2"



Schluter®-LIPROTEC-CW		Cable for LIPROTEC white LED system	
Item No.	Length	Gauge	Conductors
LT CW / 4M	4 m - 13' 1-1/2"	20AWG	2
LT CW / 8M	8 m - 26' 3"	20AWG	2
LT CW / 15M	15 m - 49' 2-1/2"	20AWG	2



Schluter®-LIPROTEC-ECX			LED driver and dimmer
Item No.	Input	Output	Power
LT ECX 1W	120V AC	24V DC	60W



Schluter®-LIPROTEC-ECD			Dimmable LED driver
Item No.	Input	Output	Power
LT ECD 1W	120V AC	24V DC	24W

Schluter®-KERDI-BOARD-SNLT 5-Year Limited Warranty

LIMITED WARRANTY COVERAGE: Subject to the conditions and limitations as stated in this Schluter®-KERDI®-BOARD-SNLT 5-Year Limited Warranty (the "Limited Warranty"), Schluter Systems warrants that its Schluter®-KERDI®-BOARD-SNLT Niche with LED products (hereinafter collectively, the "Product") will be free from manufacturing defects and will perform as described in the Schluter®-KERDI-BOARD-SNLT Installation Instructions, Schluter®-LIPROTEC-ECD Installation Guide and/or Schluter®-LIPROTEC-ECX Installation Guide, and Schluter®-KERDI-BOARD-SNLT Shower Niche with LIPROTEC LED Lighting Technical Data Sheet (the "Written Materials") for a period of five (5) 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; and "Tile Assembly" is defined to include the Products, non-reusable tile surfaces, and applicable setting and grouting materials.

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, subfloor/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 as follows:

- If the niche or mounting profile are proven defective, Schluter Systems shall, at its election, (a) reinstall or replace the failed portion of the Tile Assembly or (b) pay an amount not to exceed the original square foot cost of the installation of the Tile Assembly verified to be defective. Due to conditions beyond the control of Schluter Systems (e.g., color and shade availability, discontinuation, normal wear and tear), Schluter Systems cannot guarantee or warrant an exact match to the specific tile, stone, or other tiling materials used in the original installation. In such event, substantially similar materials may be substituted.
- If the LED light strip is proven to be defective, Schluter Systems shall repair or replace such failed component.

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 or Tile Assembly, 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 subfloor/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), efflorescence and shading which are a natural occurrence with cementitious materials and are not considered a defective condition for the purposes of this Limited Warranty, 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. tile covering failure, excess point loading, overvoltage). This Limited Warranty excludes exterior applications and applications utilizing glass tile or other non-approved tile coverings, unless specifically approved in writing on a case by case basis by the Schluter Systems Technical Services Director.

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, or (b) 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. 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, 2023. If the Schluter®-KERDI®-BOARD-SNLT is used in

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 effect³. 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 must be sent to:

All Canadian claims must be sent to:

Schluter Systems L.P. Attn: Warranty Claims Dept. 194 Pleasant Ridge Road Plattsburgh, NY 12901 Schluter Systems (Canada) Inc. Attn: Warranty Claims Dept. 21100 chemin Ste-Marie Ste-Anne-de-Bellevue, QC H9X 3Y8

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

² This 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.

^a In the event that Owner fails to provide such required invoices relating to the original installation, Schluter Systems shall pay Owner an amount equal to the average, reasonable costs of a comparable installation. If the parties fail to agree on such amount, such dispute shall promptly, and in the first instance, be submitted: (a) if a U.S. claim, to arbitration in Clinton County, New York, in accordance with the rules of the American Arbitration Association, or (b) if a Canadian claim, in the Province of Quebec, Canada, in accordance with the ADRIC Arbitration Rules. Any outcome of such arbitration proceeding shall be final and binding upon the parties hereto.

Schluter®-LIPROTEC Driver 5-Year Limited Warranty

LIMITED WARRANTY COVERAGE: Subject to the conditions and limitations as stated in this Schluter®-LIPROTEC Driver 5-Year Limited Warranty (the "Limited Warranty"), Schluter Systems warrants that its Schluter®-LIPROTEC-ECD and Schluter®-LIPROTEC-ECX products (hereinafter collectively referred to as the "Products") will be free from manufacturing defects and will perform as described in the Schluter®-KERDI-BOARD-SNLT Installation Instructions, Schluter®-LIPROTEC-ECD Installation Guide and/or Schluter®-LIPROTEC-ECX Installation Guide, and Schluter®-LIPROTEC Technical Data Sheet (the "Written Materials") for a period of five (5) 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, subfloor/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 disconnection, 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 subfloor/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), efflorescence and shading which are a natural occurrence with cementitious materials and are not considered a defective condition for the purposes of this Limited Warranty, 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, overvoltage). This Limited Warranty excludes exterior applications, unless specifically approved in writing on a case by case basis by the Schluter Systems Technical Services Director.

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 of the Products 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 a 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,

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.

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

² This 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.

Schluter®-LIPROTEC-CW Cable 5-Year Limited Warranty

LIMITED WARRANTY COVERAGE: Subject to the conditions and limitations as stated in this Schluter®-LIPROTEC-CW Cable 5-Year Limited Warranty (the "Limited Warranty"), Schluter Systems warrants that its Schluter-LIPROTEC-CW cable kits (hereinafter collectively referred to as the "Products") will be free from manufacturing defects and will perform as described in the Schluter®-KERDI-BOARD-SNLT Installation Instructions, Schluter®-LIPROTEC-ECD Installation Guide and/or Schluter®-LIPROTEC-ECX Installation Guide, and Schluter®-LIPROTEC Technical Data Sheet (the "Written Materials") for a period of five (5) 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, and "Tile Assembly" is defined to include the Products, non-reusable tile surfaces, and applicable setting and grouting materials.

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, subfloor/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 (a) reinstall or replace the failed portion of the Tile Assembly or (b) pay an amount not to exceed the original square foot cost of the installation of the Tile Assembly verified to be defective. Due to conditions beyond the control of Schluter Systems (e.g., color and shade availability, discontinuation, normal wear and tear), Schluter Systems cannot guarantee or warrant an exact match to the specific tile, stone, or other tiling materials used in the original installation. In such event, substantially similar materials may be substituted.

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 subfloor/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), efflorescence and shading which are a natural occurrence with cementitious materials and are not considered a defective condition for the purposes of this Limited Warranty, 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, overvoltage). This Limited Warranty excludes exterior applications, unless specifically approved in writing on a case by case basis by the Schluter Systems Technical Services Director.

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 of the Products 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 a 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,

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 effect³. 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 must be sent to:

Schluter Systems L.P. Attn: Warranty Claims Dept. 194 Pleasant Ridge Road Plattsburgh, NY 12901 All Canadian claims must be sent to:

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

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

² This 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.

^a In the event that Owner fails to provide such required invoices relating to the original installation, Schluter Systems shall pay Owner an amount equal to the average, reasonable costs of a comparable installation. If the parties fail to agree on such amount, such dispute shall promptly, and in the first instance, be submitted: (a) if a U.S. claim, to arbitration in Clinton County, New York, in accordance with the rules of the American Arbitration Association, or (b) if a Canadian claim, in the Province of Quebec, Canada, in accordance with the ADRIC Arbitration Rules. Any outcome of such arbitration proceeding shall be final and binding upon the parties hereto.