

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com





Similar to illustration

Pin headers in glass-fibre-reinforced plastic with straight wire outlet; optimised for wave soldering. The flange variant (F) can be screwed onto the respective counter piece or the circuit board. There is no need for an extra screw to connect the circuit board when the solder flange (LF) version is used. This also protects the solder points from mechanical strain. All pin headers can be manually coded or ordered pre-coded. HC = High Current.

General ordering data

Туре	SL 5.08HC/17/180 3.2SN BK BX
Order No.	<u>1148430000</u>
Version	PCB plug-in connector, male header, open side, THT solder connection, 5.08 mm, Number of poles: 17, 180°, Solder pin length (I): 3.2 mm, tinned, black, Box
GTIN (EAN)	4032248934287
Qty.	20 pc(s).
Product data	IEC: 400 V / 24 A UL: 300 V / 18.5 A
Packaging	Box

Technical data



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Dimensions	and weights
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Width	86.36 mm	Width (inches)	3.4 inch
Height	15.2 mm	Height (inches)	0.598 inch
Height of lowest version	12 mm	Depth	8.5 mm
Depth (inches)	0.335 inch	Net weight	6.8 g

System specifications

Product family	OMNIMATE Signal - series BL/SL 5.08
Mounting onto the PCB	THT solder connection
Pitch in inches (P)	0.2 inch
Number of poles	17
Solder pin length (I)	3.2 mm
Tolerance of solder pin position	± 0.20 mm
Solder pin dimensions = d tolerance	0 / -0,03 mm
Solder eyelet hole diameter tolerance (D)+ 0,1 mm	
L1 in inches	3.2 inch
Pin series quantity	1
Can be coded	Yes
Plugging force/pole, max.	10 N

Type of connection	
	Board connection
Pitch in mm (P)	5.08 mm
Outgoing elbow	180°
Number of solder pins per pole	1
Solder pin length tolerance	+0.1 / -0.3 mm
Solder pin dimensions	d = 1.2 mm, Octagonal
Solder eyelet hole diameter (D)	1.3 mm
L1 in mm	81.28 mm
Number of rows	1
Volume resistance	≤ 5mΩ
Plugging cycles	25
Pulling force/pole, max.	7.5 N

Material data

Insulating material	PA GF
Colour chart (similar)	RAL 9011
Comparative Tracking Index (CTI)	≥ 550
UL 94 flammability rating	V-0
Contact material	CuMg
Layer structure of solder connection	1-3 μm Ni / 2-4 μm Sn
	matt
Storage temperature, min.	-25 °C
Max. relative humidity during storage	70 %
Operating temperature, max.	100 °C
Temperature range, installation, max.	100 °C

Colour	black
Insulating material group	II
Insulation strength	≥ 10 ⁸ Ω
GWFI	960 °C
Contact surface	tinned
Layer structure of plug contact	1-3 µm Ni / 2-4 µm Sn
	matt
Storage temperature, max.	50 °C
Operating temperature, min.	-50 °C
Temperature range, installation, min.	-25 °C

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	24 A
Rated current, max. number of poles		Rated current, min. number of poles	
(Tu=20°C)	19 A	(Tu=40°C)	21 A
Rated current, max. number of poles		Rated voltage for surge voltage class /	
(Tu=40°C)	16.5 A	pollution degree II/2	400 V
Rated voltage for surge voltage class /		Rated voltage for surge voltage class /	
pollution degree III/2	320 V	pollution degree III/3	250 V
Rated impulse voltage for surge voltage		Rated impulse voltage for surge voltage	
class/ pollution degree II/2	4 kV	class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage			
class/ contamination degree III/3	4 kV		

Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	18.5 A	Rated current (Use group D / CSA)	18.5 A

Technical data

Rated data acc. to UL 1059



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Institute (cURus)		Certificate No. (cURus)	
	0 1 1 1 10		
			E60693
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group B / UL 1059)	18.5 A	Rated current (Use group D / UL 1059)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		
Packing			
	_		
Packaging VBE width	Box 61 mm	VPE length VPE height	44 mm 220 mm
VPE width	61 mm	VPE neight	220 mm
Classifications			
ETIM 6.0	EC002637	ETIM 7.0	EC002637
eClass 9.0	27-44-04-02	eClass 9.1	27-44-04-02
eClass 10.0	27-44-04-02		
Notes			
NOTES			
Notes	Additional colours on request		
	Gold-plated contact surfaces c	on request	
	Rated current related to rated	cross-section & min. No. of poles.	
	• P on drawing = pitch		
	 Rated data refer only to the component itself. Clearance and creepage distances to other components are t be designed in accordance with the relevant application standards. 		
IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative proper in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.		resp. fulfill decorative propertie
Approvals			
Approvals	see a state of the		
		KEMA	
	C M 118		

ROHS

Conform

Technical data

Downloads



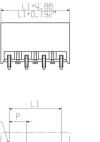
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Approval/Certificate/Document of	CB Certificate
Conformity	CB Testreport
	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN
	MB DEVICE MANUF. EN
	FL DRIVES DE
	CAT 2 PORTFOLIOGUIDE EN
	FL BUILDING SAFETY EN
	FL APPL LED LIGHTING EN
	FL INDUSTR.CONTROLS EN
	FL MACHINE SAFETY EN
	FL HEATING ELECTR EN
	FL APPL_INVERTER EN
	FL_BASE_STATION_EN
	FL ELEVATOR EN
	FL POWER SUPPLY EN
	FL 72H SAMPLE SER EN
	<u>PO OMNIMATE EN</u>
Engineering Data	<u>STEP</u>
Product Change Notification	EN - Change of packaging
	DE - Change of packaging

Drawings

Dimensional drawing

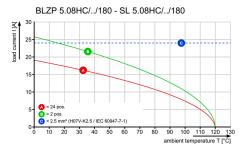






HOLE PATTERN

Graph

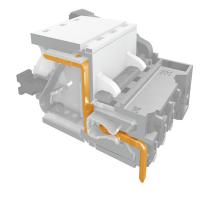




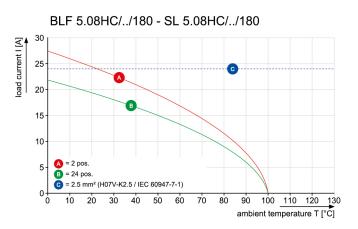
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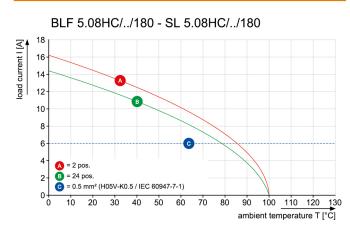
Product benefits



Safe power transmission Proven properties Graph



Graph



Creation date May 2, 2020 3:12:53 AM CEST

Catalogue status 17.04.2020 / We reserve the right to make technical changes.

Mating connector (fully pluggable)

BLF 5.08HC/270 SN

BLZP 5.08HC/225 SN

Catalogue status 17.04.2020 / We reserve the right to make technical changes.

Creation date May 2, 2020 3:12:53 AM CEST

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Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

Туре	BLF 5.08HC/17/270 SN BK	Version	Product data	Packaging
Order No.	<u>1982080000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 17,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248685776	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ²	, UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	18 pc(s).	Box	12	
Туре	BLF 5.08HC/17/270 SN OR	Version	Product data	Packaging
Type Order No.	BLF 5.08HC/17/270 SN OR <u>1982850000</u>	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 17,		Packaging Box
			IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box

Clamping-yoke connection with right-angled (90° or 270°) or angled (225°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. The also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

General ordering data

Туре	BLZP 5.08HC/17/225 SN B	Version	Product data	Packaging
Order No.	<u>1946710000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 17,	IEC: 400 V / 17.5 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248622481	$225^\circ\!,$ Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 15 A / AWG 26 - AWG 12	2
Qty.	18 pc(s).			
Туре	BLZP 5.08HC/17/225 SN 0	Version	Product data	Packaging
Order No.	<u>1946400000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 17,	IEC: 400 V / 17.5 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248622177	225°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 15 A / AWG 26 - AWG 12	2



Mating connector (fully pluggable)

BLZP 5.08HC/270 SN



Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

General ordering data

Туре	BLZP 5.08HC/17/270 SN 0	Version	Product data	Packaging
Order No.	<u>1948940000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 17,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248626397	$270^\circ\!,$ Clamping yoke connection, Clamping range, max. : $4\ mm^2,$ Box	UL: 300 V / 20 A / AWG 26 - AWG 12	2
Qty.	18 pc(s).			
Туре	BLZP 5.08HC/17/270 SN B	Version	Product data	Packaging
Type Order No.	BLZP 5.08HC/17/270 SN B <u>1949170000</u>	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 17,		Packaging Box
			IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box

BLZP 5.08HC/225B SN



Clamping-yoke connection with right-angled (90° or 270°) or angled (225°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. The also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

General ordering data

Туре	BLZP 5.08HC/17/225B SN	Version	Product data	Packaging
Order No.	<u>1945900000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 17,	IEC: 400 V / 17.5 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248621422	$225^\circ\!,$ Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 15 A / AWG 26 - AWG 12	2
Qty.	18 pc(s).			
	1 1 7			
Туре	BLZP 5.08HC/17/225B SN	Version	Product data	Packaging
-	BLZP 5.08HC/17/225B SN 1946130000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 17,		Packaging Box
Туре			IEC: 400 V / 17.5 A / 0.2 - 4 mm ²	Box



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Mating connector (fully pluggable)

BLZP 5.08HC/180 SN



Female plug with clamping-yoke screw system for connecting wires with straight (180°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. The also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

General ordering data

Туре	BLZP 5.08HC/17/180 SN 0	Version	Product data	Packaging
Order No.	<u>1943730000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 17,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248617746	$180^\circ,$ Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	2
Qty.	18 pc(s).			
T				
Туре	BLZP 5.08HC/17/180 SN B	Version	Product data	Packaging
Type Order No.	BLZP 5.08HC/17/180 SN B 1943960000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 17,		Packaging Box
			IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box

BLF 5.08HC/180 SN



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

General ordering data

Туре	BLF 5.08HC/17/180 SN BK	Version	Product data	Packaging
Order No.	<u>1013590000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 17,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248721733	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	18 pc(s).	Box	12	
Туре	BLF 5.08HC/17/180 SN OR	Version	Product data	Packaging
Type Order No.	BLF 5.08HC/17/180 SN OR 1013850000			Packaging Box
	-, ,		IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box

Creation date May 2, 2020 3:12:53 AM CEST



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Mating connector (fully pluggable)

BLZP 5.08HC/90 SN



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Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

General ordering data

Туре	BLZP 5.08HC/17/90 SN OR	Version	Product data	Packaging
Order No.	<u>1948160000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 17,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248624584	$90^\circ,$ Clamping yoke connection, Clamping range, max. : 4 $mm^2,$ Box	UL: 300 V / 20 A / AWG 26 - AWG 12	2
Qty.	18 pc(s).			
Ŧ				
Туре	BLZP 5.08HC/17/90 SN BK	Version	Product data	Packaging
Type Order No.	BLZP 5.08HC/17/90 SN BK <u>1948390000</u>	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 17,		Packaging Box
			IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box

BLL 5.08/180



Female header for PCB mounting. The solder pin length is optimised for wave flow soldering.

General ordering data

Туре	BLL 5.08/17/180 3.2 SN	Version	Product data	Packaging
Order No.	<u>1648940000</u>	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190293420	connection, 5.08 mm, Number of poles: 17, 180°, Solder pin length	UL: 300 V / 15 A	
Qty.	18 pc(s).	(I): 3.2 mm, tinned, orange, Box		

Mating connector (fully pluggable)

BLF 5.08HC/90 SN

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- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

General ordering data

Туре	BLF 5.08HC/17/90 SN OR	Version	Product data	Packaging
Order No.	<u>1001680000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 17,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248693481	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	18 pc(s).	Box	12	
Туре	BLF 5.08HC/17/90 SN BK	Version	Product data	Packaging
Type Order No.	BLF 5.08HC/17/90 SN BK 1000180001	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 17,		Packaging Box
			IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	0 0

BLL 5.08/90



Female header for PCB mounting. The solder pin length is optimised for wave flow soldering.

General ordering data

Туре	BLL 5.08/17/90 3.2 SN O	Version	Product data	Packaging
Order No.	<u>1648460000</u>	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190292935	connection, 5.08 mm, Number of poles: 17, 90°, Solder pin length (I): UL: 300 V / 15 A	
Qty.	18 pc(s).	3.2 mm, tinned, orange, Box		

Mating connector (fully pluggable)

BLL 5.08/180B



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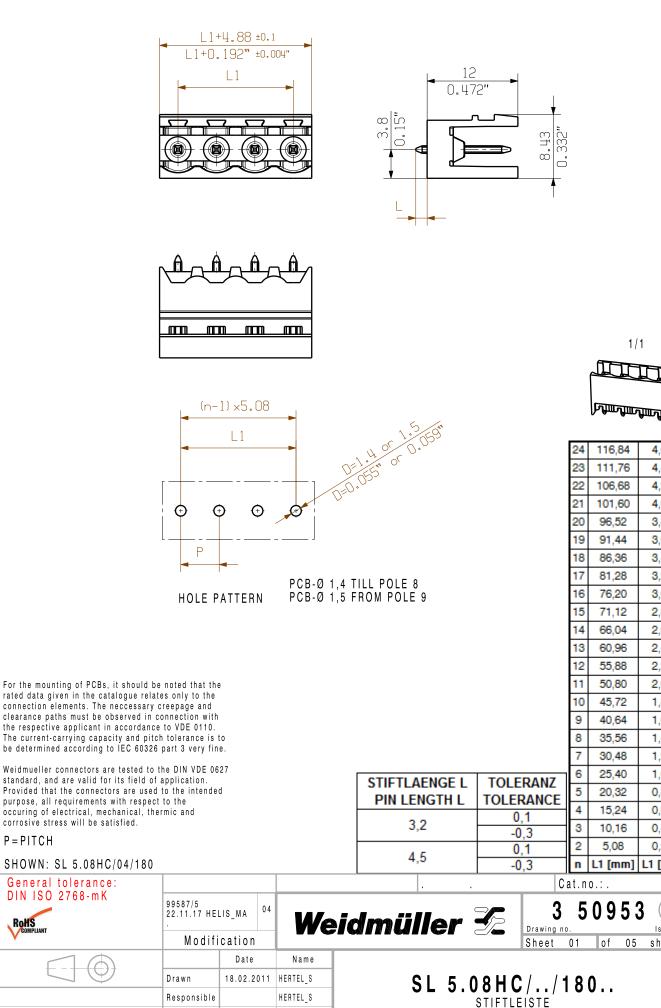
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Female header for PCB mounting. The solder pin length is optimised for wave flow soldering.

Genera	General ordering data				
Туре	BLL 5.08/17/180B 3.2SN	Version	Product data	Packaging	
Order No.	<u>1682880000</u>	PCB plug-in connector, female header, Dovetails for fixing blocks, THT	IEC: 400 V / 23 A	Box	
GTIN (EAN)	4008190474645	solder connection, 5.08 mm, Number of poles: 17, 180°, Solder pin	UL: 300 V / 15 A		
Qty.	18 pc(s).	length (I): 3.2 mm, tinned, orange, Box			

The English version is binding

Dimensions without tolerances are no check dimensions



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30.11.2017

Checked

Approved

Scale: 2:1

Supersedes: .

7377

1/1

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4.400

4,200

4.000

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0,200

L1 [Inch]

04

Issue no

sheets

05

MALE HEADER

Product file: SL5.08 HC

Wave Solder Profile

Recommended wave solderding profiles

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Double Wave:

Single Wave:



Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.