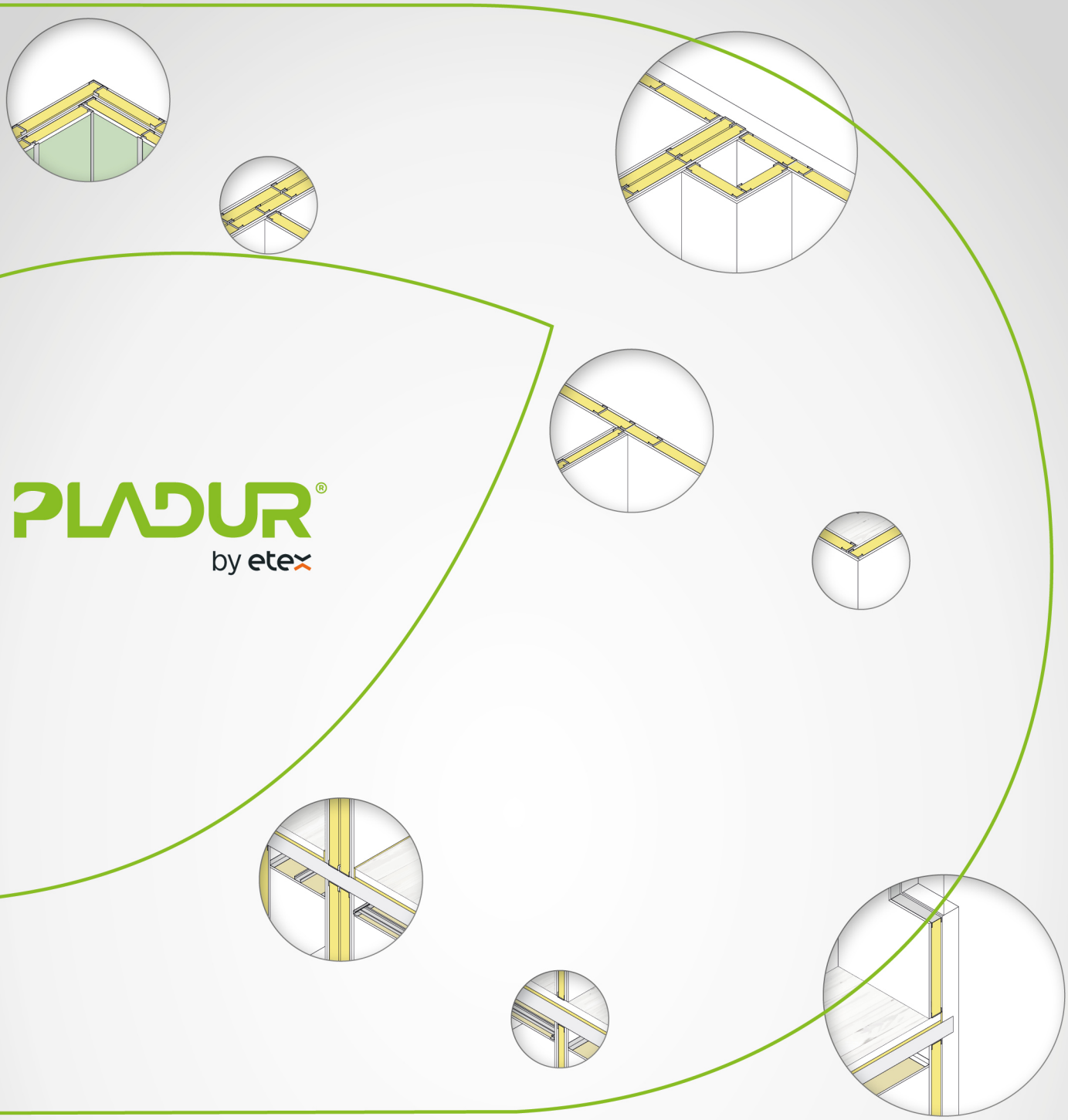


PLADUR® by etex

PLADUR® SYSTEMS GUIDE

MARCH 2025

Technical summary: specifications
designing projects

pladur.com
corporativo.pladur.com

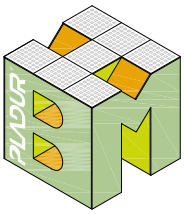
PLADUR®, LEADERS IN DIGITALISATION

All information linked and updated online

TECHNICAL MANUAL

Full **Pladur®** technical information at a glance.

BIM

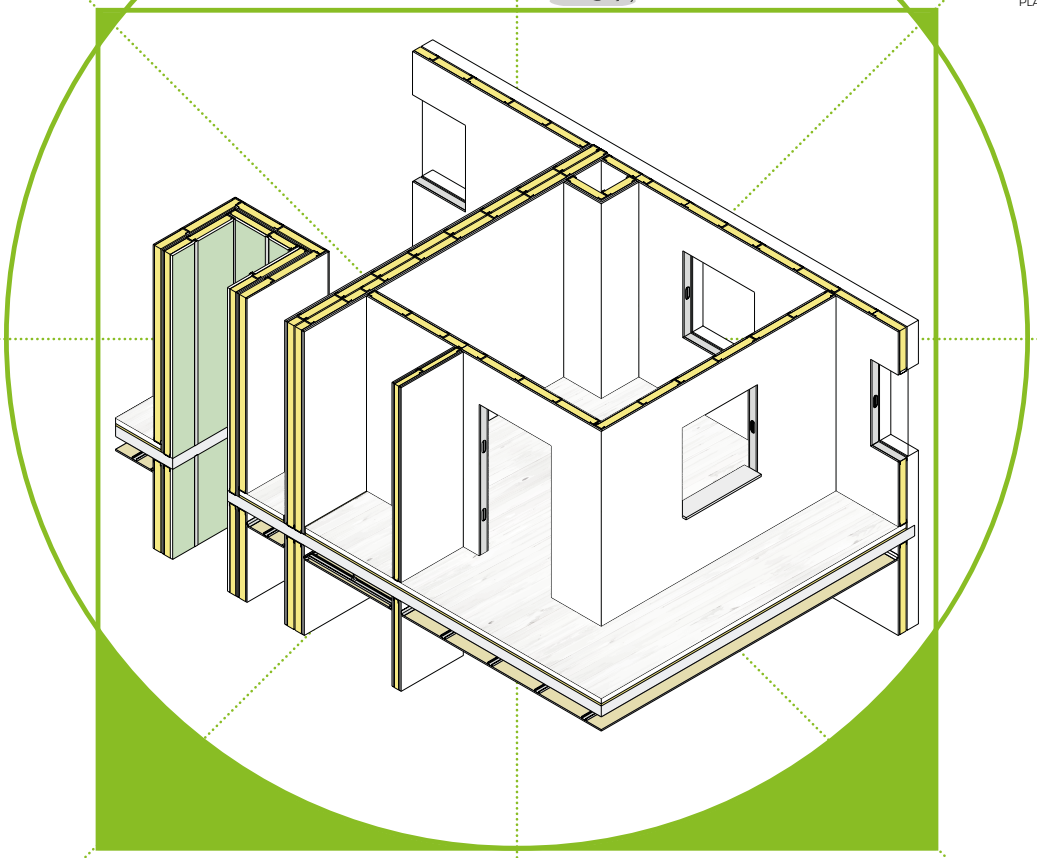


All the technical information is available in our Pladur downloads zone, in Revit and Archicad.

PLADUR.COM

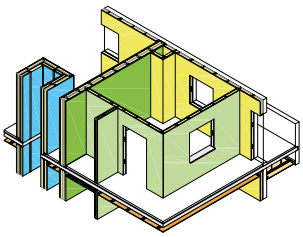
PLADUR® ONLINE STORE

PLADUR® DOWNLOAD ZONE



SYSTEM SELECTOR

Find all available information on **Pladur®** Systems and receive your own tailor-made quote.



PRICING

System prices are available on specialised construction reference websites.

Discover the Pladur® digital world at

www.pladur.es

PLADUR® by etex

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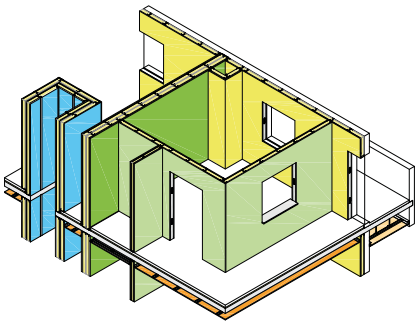
VISUAL INDEX OF SYSTEMS



PARTITION WALLS BETWEEN HOUSES

INTERIOR CEILINGS

WALL LININGS

EXTERIOR CEILINGS

PARTITION WALLS

SPECIAL SYSTEMS

PARTITION WALLS BETWEEN HOUSES	TWIN FRAME SINGLE CAVITY		PLADUR® TWIN FRAME SINGLE CAVITY FREE PARTITION	h = 2.55-6.80 m R_A = 62.8-70 dBA EI = 60-120	P. 08
	TWIN FRAME SPLIT CAVITY		PLADUR® TWIN FRAME SPLIT CAVITY PARTITION	h = 2.55-6.80 m R_A = 63-76 dBA EI = 90-120	P. 10
			PLADUR® BRACED TWIN FRAME SPLIT CAVITY PARTITION	h = 4.05-7.00 m R_A = 58.7-60.3 dBA EI = 90-120	P. 11
	ASSEMBLY		PLADUR® TWIN CAVITY PARTITION WITH TRADITIONAL WALL ASSEMBLY	h= 2.15-2.80 m R_A= 57-65 dBA	P. 12
			PLADUR® TWIN CAVITY PARTITION WITH DRYWALL ASSEMBLY	h = 2.55-2.80 m R_A = 59-65 dBA	P. 13
WALL LININGS	DIRECT		PLADUR® DIRECT BOND PLASTERBOARD WALL LININGS	h = 5 m $R_{A,tr}$ = 38-44 dBA	P. 14
			PLADUR® DIRECT BOND ENAIRGY ISOPOP® / ISOPOP+® WALL LININGS	h = 3.60 m R = 0.60-4.40 m²K/W	P. 15
	FURRING CHANNEL		PLADUR® FURRING CHANNEL WALL LINING	h = 0.60 m $R_{A,tr}$ = 37-44 dBA	P. 16
	INDEPENDENT		PLADUR® T-45 + PL PROFILES WALL LINING	h= 1.20-1.30 m $R_{A,tr}$= 51-59 dBA	P. 16
			PLADUR® STUD WALL LINING	h = 2.15-6.80 m $R_{A,tr}$ = 47-57 dBA EI = 30-90	P. 18
			PLADUR® OMNIA / SOLIDTEX STUD WALL LINING WITH LOADS	h = 1.60-6.05 m $R_{A,tr}$ = 47-55 dBA	P. 20
			PLADUR® WAB STUD WALL LINING	h = 2.70-4.40 m $R_{A,tr}$ = 53-55 dBA	P. 23
			PLADUR® MAGNA STUD WALL LINING	h = 2.10-6.60 m $R_{A,tr}$ = 53-68 dBA EI = 120	P. 24
PARTITION WALLS	SINGLE FRAME		PLADUR® SINGLE LAYER PARTITION	h = 2.60-6.80 m R_A = 39.5-49 dBA EI = 30-60	P. 25
			PLADUR® MULTI-LAYER PARTITION	h = 3.05-8.15 m R_A = 52.5-56 dBA EI = 60-120	P. 26
			PLADUR® OMNIA / SOLIDTEX PARTITION WITH LOADS	h = 2.65-7.30 m R_A = 52.5-54 dBA	P. 28
			PLADUR® WAB PARTITION	h = 3.20-5.30 m R_A = 52.5-53.5 dBA	P. 39
			PLADUR® MAGNA PARTITION	h = 3.00-7.00 m R_A = 44-56 dBA EI = 90-180	P. 40

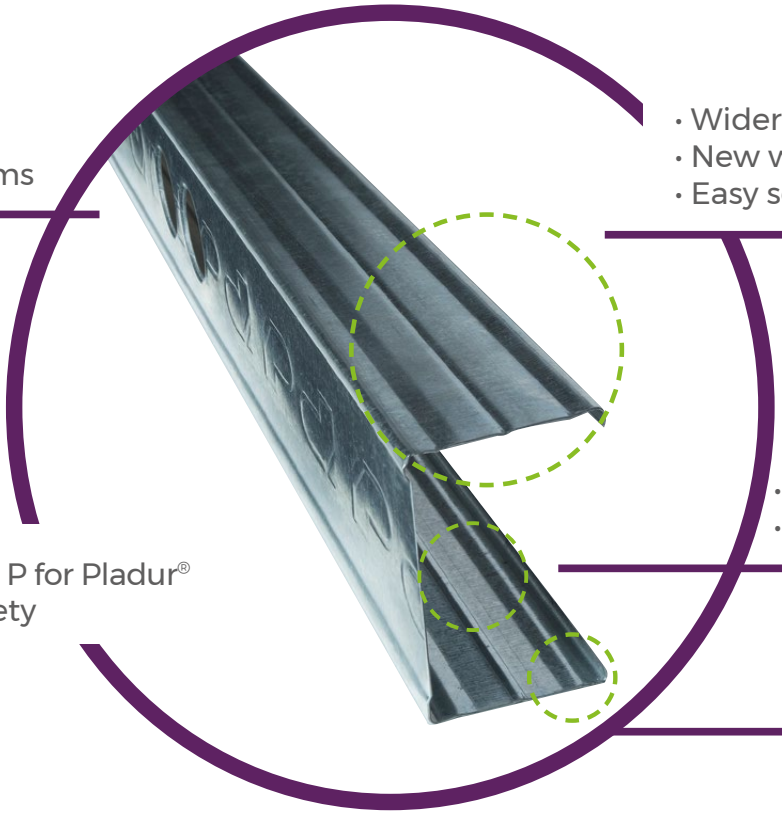
h (m): maximum height / **R_A (dBA):** acoustic insulation / **$R_{A,tr}$ (dBA):** aacoustic insulation / **R (m²K/W):** thermal resistance / **EI (min):** fire resistance.

INTERIOR CEILINGS	FURRING CHANNELS		PLADUR® FURRING CHANNELS CEILING	L = 0.40-1.30 m R_A = 52-68 dBA	P. 41
	SINGLE FRAME SUSPENDED		PLADUR® T-45 PROFILES SINGLE FRAME SUSPENDED CEILING	L = 0.60-1.10 m R_A = 57-71 dBA EI = 30-90	P. 42
			PLADUR® WAB T-45 Z5 PROFILES SINGLE FRAME SUSPENDED CEILING	L = 1.20-1.50 m R_A = 57-65 dBA	P. 42
			PLADUR® T-45 + PL PROFILES SINGLE FRAME SUSPENDED CEILING	L = 0.80-1.10 m R_A = 65-71 dBA	P. 43
			PLADUR® MAGNA T-45 PROFILES SINGLE FRAME SUSPENDED CEILING	L = 0.90 m R_A = 68-71 dBA EI = 120	P. 43
			PLADUR® T-60 PROFILES SINGLE FRAME SUSPENDED CEILING	L = 1.10-1.40 m R_A = 64-72 dBA	P. 44
			PLADUR® STUDS SINGLE FRAME CEILING	L = 1.80-2.80 m R_A = 64-72 dBA	P. 44
	HANGER-FREE		PLADUR® HANGER-FREE CEILING	L = 1.80-2.15 m R_A = 64-67 dBA	P. 45
	TWIN FRAME SUSPENDED		PLADUR® PH-45 + T-45 PROFILES TWIN FRAME SUSPENDED CEILING	L = 0.80-0.90 m R_A = 62-70 dBA	P. 45
			PLADUR® T-60 (D) PROFILES TWIN FRAME SUSPENDED CEILING	L = 0.70-1.10 m R_A = 62-71 dBA	P. 46
			PLADUR® GL + T-45 PROFILES TWIN FRAME SUSPENDED CEILING	L = 2.90-3.10 m R_A = 63-70 dBA	P. 46
	NEO		PLADUR® LIGHT NEO SUSPENDED CEILING	L = 1.65 m	P. 47
			PLADUR® BOARD WIDTH 1200 mm NEO SUSPENDED CEILING	L = 1.40-1.65 m R_A = 70.8-73.6 dBA EI = 30-60	P. 48
			PLADUR® MAGNA NEO SUSPENDED CEILING	L = 1.20-1.30 m R_A = 73.7-74.9 dBA EI = 90-120	P. 49
			PLADUR® FON+ NEO CONCEALED ACOUSTIC CEILING	L = 1.45 m	P. 49
	ACOUSTIC CONDITIONING AND DECORATIVE		PLADUR® FON+ T-60 PROFILES CONCEALED ACOUSTIC CEILING	L = 1.20 m	P. 50
			PLADUR® FON+ T-60 (D) PROFILES CONCEALED ACOUSTIC CEILING	L = 0.60-0.90 m	P. 50
			PLADUR® FON+ AND DECOR TEE GRID CEILING	L = 1.20 m	P. 51
EXTERIOR CEILINGS	SINGLE FRAME SUSPENDED		PLADUR® WAB SUSPENDED EXTERIOR CEILING	L = 0.35-1.30 m	P. 56
SPECIAL SYSTEMS	HIGH RISE PARTITIONS		PLADUR® SMALL GAP HIGH RISE PARTITION	h = 4.85-10.75 m R_A = 53-59.9 dBA EI = 60-120	P. 57
			PLADUR® VARIABLE GAP HIGH RISE PARTITION	h = 5.60-10.10 m R_A = 55-58.7 dBA EI = 60-120	P. 58
	SHAFTWALL PARTITIONS		PLADUR® SHAFT WALL PARTITION	h = 4.5 m R_A = 59.4 dBA EI = 120-180	P. 58
			PLADUR® SHAFT WALL + STUDS WALL LINING	h = 2.15-4.3 m R_A = 59.4-62.2 dBA EI = 120	P. 59

h (m): maximum height / **L (m):** hanger distance / **$R_{A,tr}$ (dBA):** aacoustic insulation / **EI (min):** fire resistance.

Pladur® studs and u-tracks

XL



- Perforations with safety rims

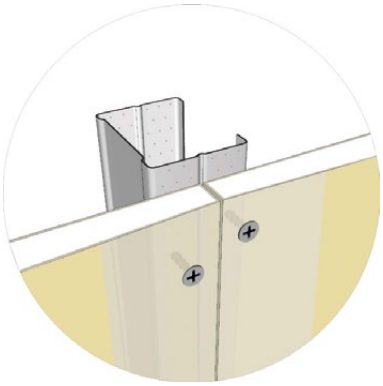
- Wider wings
- New wing geometry
- Easy screw attachment

- More folds
- Greater thickness

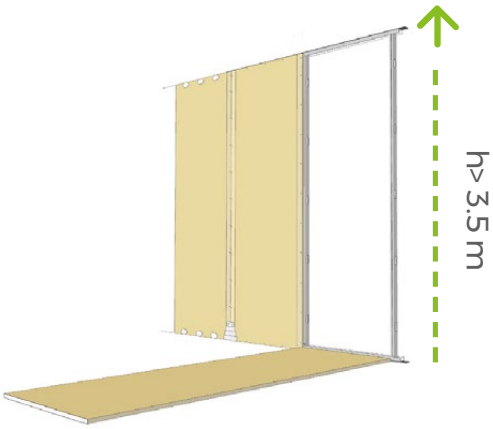
- Stamped with a P for Pladur®
- Quality and safety

- Smaller angles

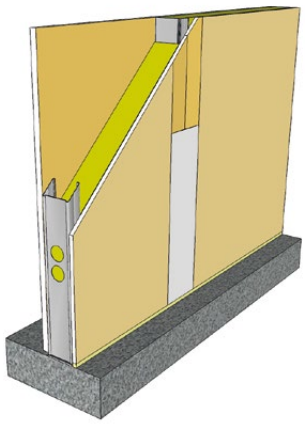
Where to use XL profiles?



To make an **easier installation**



In high partitions h > 3,5 m
In high partitions, avoid the usage of wider wings.



To achieve **greater height without increasing the thickness** of the partition gaining approximately 15 cm in height.

PLADUR® STUDS SYSTEMS WITH DESCRIPTION

Pladur® studs systems description stand for the thickness of the system, the kind of frame, the type of stud used and number of boards.

Pladur® studs systems description helps you to navigate through all the below tools: **Systems guides, Systems selector, Technical manual, Pricing (Cype / Presto), BIM download cloud.**

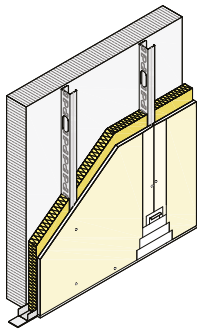
Pladur® System E/ m (M1 + e + M2) n°P + n°MW

Where:

E	system thickness
m	stud distance on centres
M	stud type
e	distance between structures
n°P	number and type of boards
n°MW	number and type of mineral wool

Examples of **Pladur® systems** names in different construction units and with different stud and board configurations.

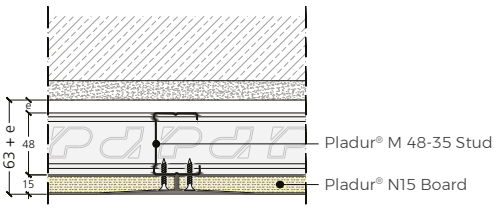
WALL LININGS



Pladur® wall linings 63/600 (48-35) 1N MW

[48-35 + 1x15N]

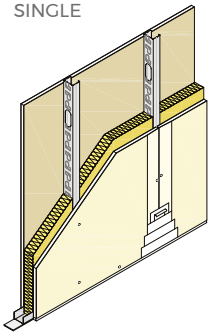
system thickness
stud on centres
stud type
number and type of board
number and type of mineral wool



Name

PARTITION WALLS

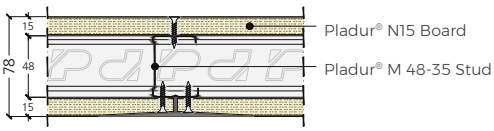
SINGLE



Pladur® partition 78/600 (48-35) 2N MW

[1x15N + 48-35 + 1x15N]

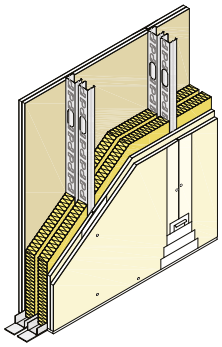
system thickness
stud on centres
stud type
number and type of board
number and type of mineral wool



Name

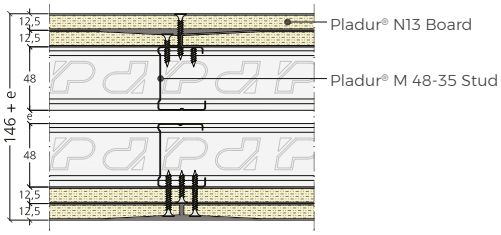
PARTITION WALLS BETWEEN HOUSES

TWIN FRAME SINGLE CAVITY PARTITION



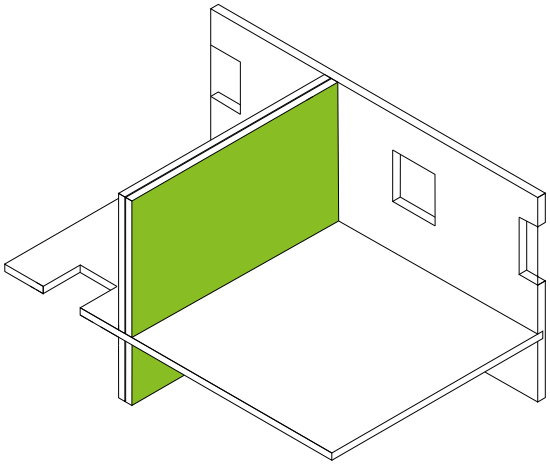
Pladur® partition 146/600 (48-35 + e + 48-35) 4N 2MW

system thickness
stud on centres
1st stud type
distance between structures
2nd stud type
number and type of board
number and type of mineral wool



Name

PARTITION WALLS BETWEEN HOUSES



PARTITION WALLS BETWEEN HOUSES

Pladur® partition walls between houses are composed of two or more metal frames to which **Pladur®** boards are screwed on both sides of the partition. These are used for vertical separation of:

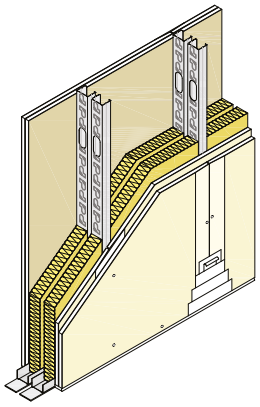
- Two houses or units with different premises.
- A home or use unit and common zones.
- Premises that require **high acoustic insulation.**

HIGH ACOUSTIC PERFORMANCE

100 QUALITY CERTIFIED PLASTER

FIRE RESISTANCE

LIGHT SYSTEMS



TWIN FRAME SINGLE CAVITY

PLADUR® TWIN FRAME SINGLE FREE CAVITY PARTITION

SYSTEM DEFINITION

Partition wall consisting of two **Pladur®** boards screwed on each side to a free galvanised steel twin frame, separated from each other by a variable distance (minimum gap of 10 mm). Both frames are built from **Pladur®** studs (vertical elements) and **Pladur®** U-tracks (horizontal elements).

FIELD OF APPLICATION

Partition walls between areas of different uses (habitable premises, protected or otherwise) and between these areas and other common areas in buildings. High performance acoustic solutions as their frames are not connected to each other. Maximum system height defined by the inertia of each separate frame.

Profile	System	Boards	Mass (Kg/m²)	Maximum height (m)				Thermal resistance m²K/W	Acoustic insulation		Fire resistance[1]	
				600	400	600	400		R_A (dBA)	R_w (C, C_{tr}) (dB)	N HI I	F O
M 48-35 Pladur® stud	146 (48-35+e+48-35) 2MW	4 x 12.5	44	2.55	2.80	3.05	3.35	2.81	62.8	65 (-3, -10)	EI 60	EI 120
	156 (48-35+e+48-35) 2MW	4 x 15	50	2.55	2.80	3.05	3.35	2.85	66.5	67.5 (-3, -9)	EI 60	EI 120
	168 (48-35+e+48-35) 2MW	4 x 18	64	2.85	3.15	3.40	3.75	2.89	67	69 (-3, -9)	EI 60	Not applicable
M 48-45 XL Pladur® stud	146 (48-45+e+48-45) 2MW	4 x 12.5	44	2.70	2.95	3.20	3.50	2.81	62.8	65 (-3, -10)	EI 60	EI 120
	156 (48-45+e+48-45) 2MW	4 x 15	50	2.70	2.95	3.20	3.50	2.85	66.5	67.5 (-3, -9)	EI 60	EI 120
	168 (48-45+e+48-45) 2MW	4 x 18	64	3.00	3.30	3.55	3.95	2.89	67	69 (-3, -9)	EI 60	Not applicable
M 62-45 XL Pladur® stud	174 (62-45+e+62-45) 2MW	4 x 12.5	45	3.10	3.40	3.70	4.05	3.53	62.8	65 (-3, -10)	EI 60	EI 120
	184 (62-45+e+62-45) 2MW	4 x 15	51	3.10	3.40	3.70	4.05	3.57	66.5	67.5 (-3, -9)	EI 60	EI 120
	196 (62-45+e+62-45) 2MW	4 x 18	65	3.45	3.85	4.10	4.55	3.61	67	69 (-3, -9)	EI 60	Not applicable

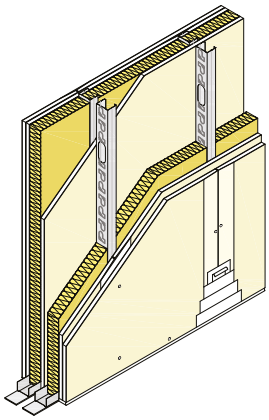
(1) Fire resistance in **EI 60** systems is valid up to a maximum height of **5.0 m**, in accordance with EN standard 15254-3.
Fire resistance in **EI 120** systems with Pladur® **F** is valid up to a maximum height of **3.0 m**, in accordance with EN standard 1364-1.
Fire resistance in **EI 120** systems with Pladur® **OMNIA** is valid up to a maximum height of **5.0 m**, in accordance with EN standard 15254-3.

N Pladur® **N** board HI Pladur® **HI** board I Pladur® **I** board F Pladur® **F** board O Pladur® **OMNIA** board

Profile	System	Boards	Mass (Kg/m²)	Maximum height (m)				Thermal resistance m²K/W	Acoustic insulation		Fire resistance[1]	
				]		][			R_A (dBA)	R_w (C, C_u) (dB)	N HI I	F O
				600	400	600	400					
M 70-35 Pladur® stud	190 (70-35+e+70-35) 2MW	4 x 12.5	45	3.20	3.55	3.80	4.20	3.91	64.4	66 (-2, -9)	EI 60	EI 120
	200 (70-35+e+70-35) 2MW	4 x 15	51	3.20	3.55	3.80	4.20	3.95	67.6	69 (-2, -7)	EI 60	EI 120
	212 (70-35+e+70-35) 2MW	4 x 18	65	3.60	3.95	4.25	4.70	3.99	69	71 (-3, -9)	EI 60	Not applicable
M 70-45 XL Pladur® stud	190 (70-45+e+70-45) 2MW	4 x 12.5	45	3.35	3.70	4.00	4.40	3.91	64.4	66 (-2, -9)	EI 60	EI 120
	200 (70-45+e+70-45) 2MW	4 x 15	51	3.35	3.70	4.00	4.40	3.95	67.6	69 (-2, -7)	EI 60	EI 120
	212 (70-45+e+70-45) 2MW	4 x 18	65	3.75	4.15	4.45	4.95	3.99	69	71 (-3, -9)	EI 60	Not applicable
M 90-45 XL Pladur® stud	230 (90-45+e+90-45) 2MW	4 x 12.5	47	3.80	4.25	4.55	5.05	5.01	63	65 (-3, -9)	EI 60	EI 120
	240 (90-45+e+90-45) 2MW	4 x 15	53	3.80	4.25	4.55	5.05	5.05	67	69 (-3, -9)	EI 60	EI 120
	252 (90-45+e+90-45) 2MW	4 x 18	67	4.30	4.75	5.10	5.65	5.09	70	72 (-3, -8)	EI 60	Not applicable
M 90 Pladur® stud	230 (90+e+90) 2MW	4 x 12.5	47	3.90	4.30	4.60	5.10	5.01	63	65 (-3, -9)	EI 60	EI 120
	240 (90+e+90) 2MW	4 x 15	53	3.90	4.30	4.60	5.10	5.05	67	69 (-3, -9)	EI 60	EI 120
	252 (90+e+90) 2MW	4 x 18	67	4.35	4.80	5.15	5.70	5.09	70	72 (-3, -8)	EI 60	Not applicable
M 100-45 XL Pladur® stud	250 (100-45+e+100-45) 2MW	4 x 12.5	47	4.05	4.50	4.85	5.35	5.66	63	65 (-3, -9)	EI 60	EI 120
	260 (100-45+e+100-45) 2MW	4 x 15	53	4.05	4.50	4.85	5.35	5.70	67	69 (-3, -9)	EI 60	EI 120
	272 (100-45+e+100-45) 2MW	4 x 18	67	4.55	5.05	5.40	6.00	5.74	70	72 (-3, -8)	EI 60	Not applicable
M 125-45 XL Pladur® stud	300 (125-45+e+125-45) 2MW	4 x 12.5	49	4.60	5.10	5.50	6.10	7.04	63	65 (-3, -9)	EI 60	EI 120
	310 (125-45+e+125-45) 2MW	4 x 15	55	4.60	5.10	5.50	6.10	7.08	67	69 (-3, -9)	EI 60	EI 120
	322 (125-45+e+125-45) 2MW	4 x 18	69	5.15	5.70	6.15	6.80	7.12	70	72 (-3, -8)	EI 60	Not applicable

(1) Fire resistance in **EI 60** systems is valid up to a maximum height of **5.0 m**, in accordance with EN standard 15254-3.
Fire resistance in **EI 120** systems with Pladur® **F** is valid up to a maximum height of **3.0 m**, in accordance with EN standard 1364-1.
Fire resistance in **EI 120** systems with Pladur® **OMNIA** is valid up to a maximum height of **5.0 m**, in accordance with EN standard 15254-3.

N Pladur® **N** board HI Pladur® **HI** board I Pladur® **I** board F Pladur® **F** board O Pladur® **OMNIA** board



TWIN FRAME SPLIT CAVITY

PLADUR® TWIN FRAME SPLIT CAVITY PARTITION

SYSTEM DEFINITION

Partition wall consisting of two **Pladur®** boards screwed on each side to a free galvanised steel twin frame, separated from each other by a variable distance (minimum gap of 10 mm + thickness of middle board). Both frames are built from **Pladur®** studs (vertical elements) and **Pladur®** U-tracks (horizontal elements).

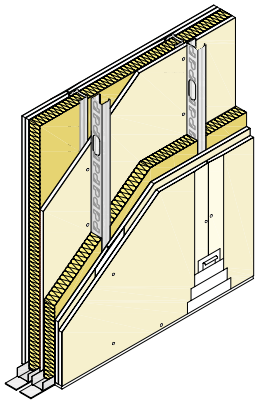
FIELD OF APPLICATION

Partition walls between areas of different uses (habitable premises, protected or otherwise) and between these areas and other common areas in buildings. High performance acoustic solutions as their frames are not connected to each other. Maximum system height defined by the inertia of each separate frame.

Profile	System	Boards	Mass (Kg/m²)	Maximum height (m)				Thermal resistance m²K/W	Acoustic insulation		Fire resistance(1)	
				600	400	600	400		R_A (dBA)	R_w (C, C_{tr}) (dB)	N HI I	F O
M 48-35 Pladur® stud	158.5 (48-35 + 12.5 + e + 48-35) 2MW	5 x 12.5	55	2.55	2.80	3.05	3.35	3.02	63	65 (-3, -10)	EI 90	EI 120
	171 (48-35 + 15 + e + 48-35) 2MW	5 x 15	63	2.55	2.80	3.05	3.35	3.06	67	69 (-3, -10)	EI 90	EI 120
	186 (48-35 + 18 + e + 48-35) 2MW	5 x 18	80	2.85	3.15	3.40	3.75	3.12	71	73 (-3, -10)	EI 90	Not applicable
M 48-45 XL Pladur® stud	158.5 (48-45 + 12.5 + e + 48-45) 2MW	5 x 12.5	55	2.70	2.95	3.20	3.50	3.02	63	65 (-3, -10)	EI 90	EI 120
	171 (48-45 + 15 + e + 48-45) 2MW	5 x 15	63	2.70	2.95	3.20	3.50	3.06	67	69 (-3, -10)	EI 90	EI 120
	186 (48-45 + 18 + e + 48-45) 2MW	5 x 18	80	3.00	3.30	3.55	3.95	3.12	71	73 (-3, -10)	EI 90	Not applicable
M 62-45 XL Pladur® stud	186.5 (62-45 + 12.5 + e + 62-45) 2MW	5 x 12.5	57	3.10	3.40	3.70	4.05	3.58	63	65 (-3, -10)	EI 90	EI 120
	199 (62-45 + 15 + e + 62-45) 2MW	5 x 15	64	3.10	3.40	3.70	4.05	3.63	67	69 (-3, -10)	EI 90	EI 120
	214 (62-45 + 18 + e + 62-45) 2MW	5 x 18	82	3.45	3.85	4.10	4.55	3.68	71	73 (-3, -10)	EI 90	Not applicable
M 70-35 Pladur® stud	202.5 (70-35 + 12.5 + e + 70-35) 2MW	5 x 12.5	57	3.20	3.55	3.80	4.20	4.12	66.9	70 (-4, -11)	EI 90	EI 120
	215 (70-35 + 15 + e + 70-35) 2MW	5 x 15	64	3.20	3.55	3.80	4.20	4.16	68.7	71 (-3, -9)	EI 90	EI 120
	230 (70-35 + 18 + e + 70-35) 2MW	5 x 18	82	3.60	3.95	4.25	4.70	4.22	74	76 (-3, -9)	EI 90	Not applicable
M 70-45 XL Pladur® stud	202.5 (70-45 + 12.5 + e + 70-45) 2MW	5 x 12.5	57	3.35	3.70	4.00	4.40	4.12	66.9	70 (-4, -11)	EI 90	EI 120
	215 (70-45 + 15 + e + 70-45) 2MW	5 x 15	64	3.35	3.70	4.00	4.40	4.16	68.7	71 (-3, -9)	EI 90	EI 120
	230 (70-45 + 18 + e + 70-45) 2MW	5 x 18	82	3.75	4.15	4.45	4.95	4.22	74	76 (-3, -9)	EI 90	Not applicable
M 90-45 XL Pladur® stud	242.5 (90-45 + 12.5 + e + 90-45) 2MW	5 x 12.5	59	3.80	4.25	4.55	5.05	5.22	69	70 (-2, -9)	EI 90	EI 120
	255 (90-45 + 15 + e + 90-45) 2MW	5 x 15	66	3.80	4.25	4.55	5.05	5.26	72	74 (-3, -9)	EI 90	EI 120
	270 (90-45 + 18 + e + 90-45) 2MW	5 x 18	84	4.30	4.75	5.10	5.65	5.32	76	78 (-3, -9)	EI 90	Not applicable
M 90 Pladur® stud	242.5 (90 + 12.5 + e + 90) 2MW	5 x 12.5	59	3.90	4.30	4.60	5.10	5.22	69	70 (-2, -9)	EI 90	EI 120
	255 (90 + 15 + e + 90) 2MW	5 x 15	66	3.90	4.30	4.60	5.10	5.26	72	74 (-3, -9)	EI 90	EI 120
	270 (90 + 18 + e + 90) 2MW	5 x 18	84	4.35	4.80	5.15	5.70	5.32	76	78 (-3, -9)	EI 90	Not applicable
M 100-45 XL Pladur® stud	262.5 (100-45 + 12.5 + e + 100-45) 2MW	5 x 12.5	59	4.05	4.50	4.85	5.35	5.81	69	70 (-2, -9)	EI 90	EI 120
	275 (100-45 + 15 + e + 100-45) 2MW	5 x 15	66	4.05	4.50	4.85	5.35	5.86	72	74 (-3, -9)	EI 90	EI 120
	290 (100-45 + 18 + e + 100-45) 2MW	5 x 18	84	4.55	5.05	5.40	6.00	5.91	76	78 (-3, -9)	EI 90	Not applicable
M 125-45 XL Pladur® stud	312.5 (125-45 + 12.5 + e + 125-45) 2MW	5 x 12.5	6 1	4.60	5.10	5.50	6.10	7.19	69	70 (-2, -9)	EI 90	EI 120
	325 (125-45 + 15 + e + 125-45) 2MW	5 x 15	68	4.60	5.10	5.50	6.10	7.24	72	74 (-3, -9)	EI 90	EI 120
	340 (125-45 + 18 + e + 125-45) 2MW	5 x 18	86	5.15	5.70	6.15	6.80	7.29	76	78 (-3, -9)	EI 90	Not applicable

(1) Fire resistance in **EI 90** systems is valid up to a maximum height of **5.0 m**, in accordance with EN standard 15254-3.
Fire resistance in **EI 120** systems with Pladur® **F** is valid up to a maximum height of **3.0 m**, in accordance with EN standard 1364-1.
Fire resistance in **EI 120** systems with Pladur® **OMNIA** is valid up to a maximum height of **5.0 m**, in accordance with EN standard 15254-3.

N Pladur® **N** board HI Pladur® **HI** board I Pladur® **I** board F Pladur® **F** board O Pladur® **OMNIA** board



TWIN FRAME SPLIT CAVITY

PLADUR® BRACED TWIN FRAME SPLIT CAVITY PARTITION

SYSTEM DEFINITION

Partition wall consisting of two **Pladur®** boards screwed on each side to a braced galvanized steel twin frame, separated from each other by a middle board. Both frames are built from **Pladur®** studs (vertical elements), arranged in opposite directions and aligning the studs between those of each structure, and **Pladur®** U-tracks (horizontal elements). The studs are arranged in opposite directions, aligning their width, to allow the intermediate board to be screwed to both structures every 200 mm.

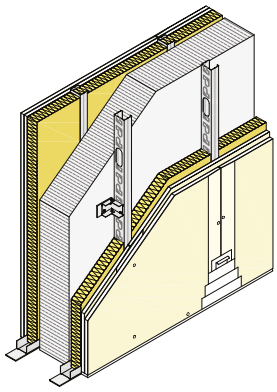
FIELD OF APPLICATION

Partition walls between areas of different uses (habitable premises, protected or otherwise) and between these areas and other common areas in buildings.

Profile	System	Boards	Mass (Kg/m²)	Maximum height (m)		Thermal resistance m²K/W	Acoustic insulation		Fire resistance[1]	
				600	400		R_A (dBA)	R_w (C, C_{tr}) (dB)	N HI I	F O
M 48-35 Pladur® stud	158.5 (48-35+12.5+e+48-35) 2MW	5 x 12.5	55	4.05	4.50	2.86	58.7	63 (-4, -13)	EI 90	EI 120
	171 (48-35+15+e+48-35) 2MW	5 x 15	63	4.10	4.55	2.91	60.3	64 (-5, -12)	EI 90	EI 120
M 48-45 XL Pladur® stud	158.5 (48-45+12.5+e+48-45) 2MW	5 x 12.5	55	4.25	4.70	2.86	58.7	63 (-4, -13)	EI 90	EI 120
	171 (48-45+15+e+48-45) 2MW	5 x 15	63	4.30	4.75	2.91	60.3	64 (-5, -12)	EI 90	EI 120
M 62-45 XL Pladur® stud	186.5 (62-45+12.5+e+62-45) 2MW	5 x 12.5	57	4.85	5.40	3.58	58.7	63 (-4, -13)	EI 90	EI 120
	199 (62-45+15+e+62-45) 2MW	5 x 15	64	4.90	5.45	3.63	60.3	64 (-5, -12)	EI 90	EI 120
M 70-35 Pladur® stud	202.5 (70-35+12.5+e+70-35) 2MW	5 x 12.5	57	5.05	5.60	3.96	58.7	63 (-4, -13)	EI 90	EI 120
	215 (70-35+15+e+70-35) 2MW	5 x 15	64	5.10	5.65	4.01	60.3	64 (-5, -12)	EI 90	EI 120
M 70-45 XL Pladur® stud	202.5 (70-45+12.5+e+70-45) 2MW	5 x 12.5	57	5.25	5.80	3.96	58.7	63 (-4, -13)	EI 90	EI 120
	215 (70-45+15+e+70-45) 2MW	5 x 15	64	5.30	5.85	4.01	60.3	64 (-5, -12)	EI 90	EI 120
M 90-45 XL Pladur® stud	242.5 (90-45+12.5+e+90-45) 2MW	5 x 12.5	59	5.75	6.35	5.06	58.7	63 (-4, -13)	EI 90	EI 120
	255 (90-45+15+e+90-45) 2MW	5 x 15	66	5.80	6.40	5.11	60.3	64 (-5, -12)	EI 90	EI 120
M 100-45 XL Pladur® stud	262.5 (100-45+12.5+e+100-45) 2MW	5 x 12.5	59	6.30	7.00	5.71	58.7	63 (-4, -13)	EI 90	EI 120
	275 (100-45+15+e+100-45) 2MW	5 x 15	66	6.35	7.00	5.76	60.3	64 (-5, -12)	EI 90	EI 120

(1) Fire resistance in systems is valid up to a maximum height of **4.8 m**, in accordance with EN standard 1364-1.

N Pladur® **N** board HI Pladur® **HI** board I Pladur® **I** board F Pladur® **F** board O Pladur® **OMNIA** board



ASSEMBLY

PLADUR® TWIN CAVITY PARTITION WITH TRADITIONAL WALL ASSEMBLY

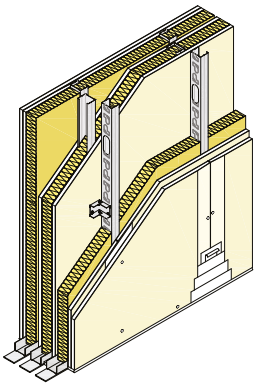
SYSTEM DEFINITION

Partition assembly consisting of two **Pladur®** independent wall linings, both braced on each side of a load-bearing wall. Each wall lining consists of a frame made from galvanised steel plate profiles, whose internal side, requires bracing for the studs, leaving a minimum space of 10 mm between the frame and the wall. One or two **Pladur®** boards are screwed to the external side of each wall lining frame.

FIELD OF APPLICATION

Partition walls between areas of different uses (habitable premises, protected or otherwise) and between these areas and other common areas in buildings.

Profile	System	Boards	Space between frames	Mass (kg/m²)	Distance between bracing		Acoustic insulation (dBA)				
							Load-bearing wall. Surface mass (kg/m²)	Wall lining increase		Wall lining + load bearing wall + wall lining	
					600	400		ΔR_A	$\Delta R_{A,tr}$	R_A	$R_{A,tr}$
M 48-35 Pladur® stud	Wall lining 63/48-35 MW + load-bearing wall + Wall lining 63/48-35 MW Braced	1 x 15 + load-bearing wall + 1 x 15	(10) + load-bearing wall + (10)	31(*)	2.15	2.35	100 200	19 17	18 16	57 63	54 59
	Wall lining 73/48-35 MW + load-bearing wall + Wall lining 73/48-35 MW Braced	2 x 12,5 + load-bearing wall + 2 x 12,5	(10) + load-bearing wall + (10)	46(*)	2.55	2.80	100 200	21 19	21 18	59 65	57 61
	Wall lining 78/48-35 MW + load-bearing wall + Wall lining 78/48-35 MW Braced	2 x 15 + load-bearing wall + 2 x 15	(10) + load-bearing wall + (10)	54(*)	2.55	2.80	100 200	21 18	21 18	59 64	57 61



ASSEMBLY

PLADUR® TWIN CAVITY PARTITION WITH DRYWALL ASSEMBLY

SYSTEM DEFINITION

Partition assembly consisting of two **Pladur®** independent wall linings, both braced on each side of a **Pladur®** load-bearing partition. Each wall lining consists of a frame made from galvanised steel plate profiles, whose internal side, depending on the free height, requires bracing for the studs, leaving a minimum space of 10 mm between the frame and the partition. One or two **Pladur®** boards are screwed to the external side of each wall lining frame.

FIELD OF APPLICATION

Partition walls between areas of different uses (habitable premises, protected or otherwise) and between these areas and other common areas in buildings.

Profile	System	Boards	Space between frames	Mass (kg/m²)	Distance between bracing		Acoustic insulation (dBA)				
							Load-bearing wall. Surface mass (kg/m²)	Wall lining increase		Wall lining + load bearing wall + wall lining	
					600	400		ΔR_A	$\Delta R_{A,tr}$	R_A	$R_{A,tr}$
M 48-35 Pladur® stud	Wall lining 63/48-35 MW + base Pladur® TB 78/48-35 MW + Wall lining 63/48-35 MW Arriostrado	1 x 15 + load-bearing wall + 1 x 15	(10) + Pladur® stub wall + (10)	60	2.60	2.80	28 TB 78(48) MW	17	21	59	55
	Wall lining 78/48-35 MW + base Pladur® TB 78/48-35 MW + Wall lining 78/48-35 MW Libre	2 x 15 + load-bearing wall + 2 x 15	(10) + Pladur® stub wall + (10)	82	2.55	2.80	28 TB 78(48) MW	23	28	65	62

TECHNICAL NOTES AND CONSIDERATIONS

MECHANICAL RESISTANCE:
In partitions indicated for refurbishment with a single 12,5 mm board, the distance on stud centres is 400 mm.

The maximum height for the partitions is measured from slab to slab or resistant support elements.

For other walls not considered in this document, please ,contact **Pladur® Technical Support** for technical specifications (150 mm studs).

The surface mass indicated in the tables is based on systems with Pladur® **N** boards.

In mixed systems:
Distance between bracing: This is the maximum distance between supports.
Wall linings with lower heights do not require bracing.

ACOUSTIC INSULATION:
The acoustic insulation values for systems with 18 mm boards are based on systems with 19 mm boards.

FIRE RESISTANCE:
Test certificate execution conditions must be observed. Not applicable

There is no Pladur® **F** 18 mm thick board.

Wall lining and partition wall systems with Pladur® **H1** and **I** boards can assume the same fire resistance classification as the Pladur® **N** board performance test. The results may be extrapolated if indicated in the building code norm and in accordance with the extension reports.

Wall lining, partition wall and ceiling systems with Pladur® **OMNIA** boards can assume the same fire resistance classification as the Pladur® **F** board performance test. The results may be extrapolated if indicated in the building code norm and in accordance with the extension report.

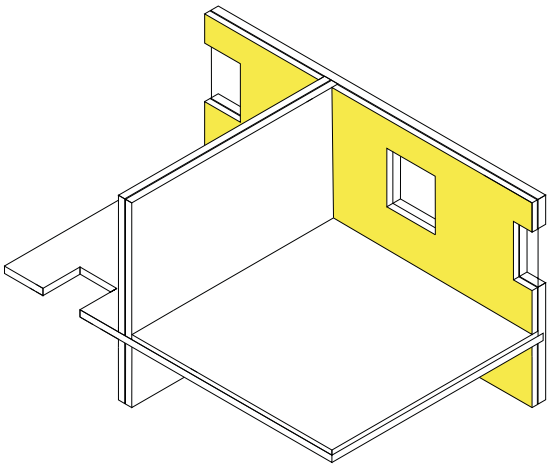
Wall lining and partition wall systems with Pladur® **F** and **OMNIA** can assume the same fire resistance classification as the Pladur® **N** board performance test. The results may be extrapolated if indicated in the building code norm and in accordance with the extension report.

THERMAL INSULATION:
MW: Mineral wool (both glass wool and rock wool) with a U-value of λ = 0,036 W/mK and variable thickness, required to fill the profile core.

SYSTEM CONFIGURATION:
(e): Twin frame systems require a minimum distance of 10 mm.

(*) In partition assembly with load-bearing walls, weight data refers to the sum of both **Pladur®** wall lining systems in the assembly, and excluding the mass of the load-bearing wall used.

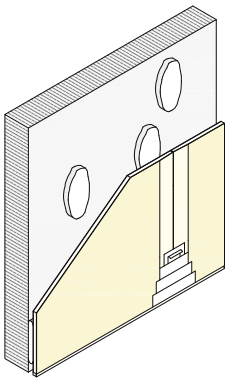
WALL LININGS



WALL LININGS

Pladur® wall linings are used to line the interior face of walls or construction elements, and to improve the acoustic and/or thermal insulation of the element they clad.

- THERMAL INSULATION
- ACOUSTIC INSULATION
- THINNER
- LIGHT SYSTEMS



DIRECT

PLADUR® DIRECT BOND PLASTERBOARD WALL LININGS

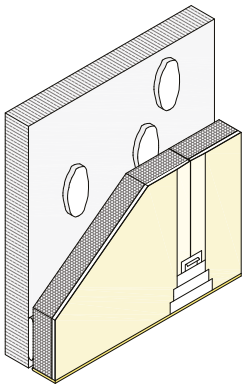
SYSTEM DEFINITION

Direct-bond wall lining consisting of a **Pladur**® board directly attached to the load-bearing wall by globs of Pladur® **PA** adhesive compound every 400 mm in both directions.

FIELD OF APPLICATION

Lining for interior and façade walls. Especially indicated for refurbishment and rehabilitation.

System	Surface mass (kg/m²)	System thickness (mm)	Acoustic insulation (dBA)				
			Load-bearing wall. Surface mass (kg/m²)	Wall lining increase		Wall lining + load bearing wall + wall lining	
				ΔR_A	$\Delta R_{A,tr}$	R_A	$R_{A,tr}$
Adhesive compound + 1 x 12.5	16	Min. 23 - Max. 33	100 200	1 1	1 1	39 47	38 44
Adhesive compound + 1 x 15	18	Min. 25 - Max. 35	100 200	2 1	2 1	40 47	38 44
Adhesive compound + 1 x 18	20	Min. 28 - Max. 38	100 200	2 1	2 1	40 47	39 44



DIRECT

PLADUR® DIRECT BOND ENAIRGY ISOPOP® / ISOPOP+® WALL LININGS

SYSTEM DEFINITION

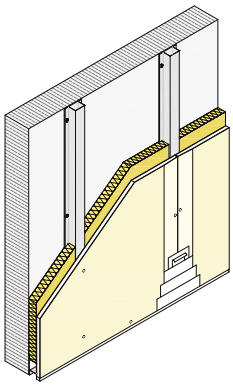
Direct-bond wall lining consisting of an Enairgy Isopop® transformed board attached directly to the load-bearing wall with globs of Pladur Enairgy® **MA** adhesive mortar placed approximately every 300 mm horizontally and 400 mm vertically.

FIELD OF APPLICATION

Inner wall lining for vertical building envelope elements (façades, party walls, enclosure walls for inner yards and basement walls). Wall lining for distribution or partition walls in a building.

Level	Product	Board thickness + Insulation (mm)	Thermal insulation		Acoustic insulation Enairgy Isopop+®				Acermi certification	
			Type	Thermal resistance m²K/W	Load-bearing wall* + Enairgy Isopop+®		Enairgy Isopop+® increase		Thermal Isopop®	Thermal-acoustic Isopop+®
					R_A (dBA)	R_w (C,C_{tr}) (dB)	ΔR_A (dBA)	$\Delta R_{A,tr}$ (dBA)		
STANDARD	R 0.60	10/13 + 20	Isopop® 35	0.60	-	-	-	-	16/174/1528	-
	R 0.65	10/13 + 20	Isopop® 32	0.65	-	-	-	-	16/174/1234	-
	R 0.90	10/13 + 30	Isopop® 35	0.90	-	-	-	-	16/174/1528	-
	R 1.15	10/13 + 40	Isopop® 35	1.15	-	-	-	-	16/174/1528	-
	R 1.30	10/13 + 40	Isopop® 32 / Isopop+® 32	1.30	51	55 (-4; -11)	2	0	16/174/1234	17/174/1316
	R 1.75	10/13 + 60	Isopop® 35	1.75	-	-	-	-	16/174/1528	-
	R 1.90	10/13 + 60	Isopop® 32 / Isopop+® 32	1.90	54	59 (-5; -14)	5	1	16/174/1234	17/174/1316
	R 2.30	10/13 + 80	Isopop® 35	2.30	-	-	-	-	16/174/1528	-
ADVANCED	R 2.55	10/13 + 80	Isopop® 32 / Isopop+® 32	2.55	57	62 (-5; -14)	8	4	16/174/1234	17/174/1316
	R 2.90	10/13 + 100	Isopop® 35	2.90	-	-	-	-	16/174/1528	-
	R 3.15	10/13 + 100	Isopop® 32 / Isopop+® 32	3.15	59	64 (-5; -14)	10	6	16/174/1234	17/174/1316
EFFICIENT	R 3.80	10/13 + 120	Isopop® 32 / Isopop+® 32	3.80	61	64 (-3; -12)	12	8	16/174/1234	17/174/1316
	R 4.40	10/13 + 140	Isopop® 32 / Isopop+® 32	4.40	62	65 (-3; -12)	13	9	16/174/1234	17/174/1316

*Load-bearing wall made with ½ foot perforated face brick, rough-coated with mortar on the interior (246 kg/m²).



FURRING CHANNEL

PLADUR® FURRING CHANNEL WALL LINING

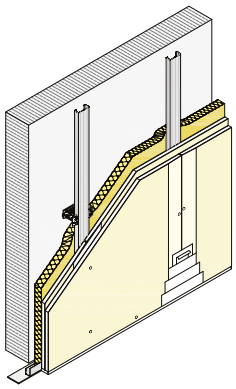
SYSTEM DEFINITION

Furring channel wall lining consisting of a frame made of galvanised steal plate profiles based on **Pladur®** furring channels anchored directly to the load-bearing wall, which has a **Pladur®** board screwed to its external side.

FIELD OF APPLICATION

Lining for interior and façade walls. It is used on all kinds of work, although it is especially indicated for refurbishment and rehabilitation.

Wall channel	System	Surface mass (kg/m²)	System thickness (mm)	Acoustic insulation (dBA)				
				Load-bearing wall. Surface mass (kg/m²)	Wall lining increase		Load bearing wall + wall lining	
					ΔR_A	$\Delta R_{A,tr}$	R_A	$R_{A,tr}$
Pladur® Furring channel **82 x 16**	Furring channel 82 x 16 + 1 x 12.5	12	29	100 200	1 0	1 0	39 45	37 41
	Furring channel 82 x 16 + 1 x 15	14	31	100 200	2 0	1 0	40 46	37 42
	Furring channel 82 x 16 + 1 x 18	17	34	100 200	2 1	2 0	40 47	38 43
Pladur® Furring channel **70 x 30**	Furring channel 70 x 30 + 1 x 12.5	12	43	100 200	3 1	2 0	41 47	38 43
	Furring channel 70 x 30 + 1 x 15	14	45	100 200	4 1	3 0	42 47	39 43
	Furring channel 70 x 30 + 1 x 18	17	48	100 200	5 2	4 1	43 48	40 44



INDEPENDENT

PLADUR® T-45 + PL PROFILES WALL LINING

SYSTEM DEFINITION

Independent wall lining consisting of a frame of galvanised steel plate profiles, using Pladur® **T-45** profiles (vertical elements) and Pladur® **Clip** U-tracks (horizontal elements), on whose inner side the profiles require bracing using Pladur® **PL** brackets, leaving a minimum space of 10 mm between the frame and the wall. One or more Pladur® boards are screwed to the external side of this frame.

FIELD OF APPLICATION

Lining for interior and façade walls to increase thermal and acoustic insulation. It is used on all kinds of work, although it is especially indicated for new buildings, refurbishment and rehabilitation.

Profile	System	Boards	Surface mass (kg/m²)	Distance between bracing		Acoustic insulation (dBA)				
						Load-bearing wall. Surface mass (kg/m²)	Wall lining increase		Load bearing wall + wall lining	
				600	400		ΔR_A	$\Delta R_{A,tr}$	R_A	$R_{A,tr}$
T-45 Pladur® stud	T-45 PL75 + 1 x 12.5 MW	1 x 12.5	12	-	1.30	100 200	16 13	13 9	54 58	51 52
	T-45 PL75 + 1 x 15 MW	1 x 15	14	1.20	1.30	100 200	17 13	15 11	55 59	51 54
	T-45 PL75 + 1 x 18 MW	1 x 18	17	1.20	1.30	100 200	17 14	16 13	55 60	52 56
	T-45 PL75 + 2 x 12.5 MW	2 x 12.5	22	1.20	1.30	100 200	18 16	17 14	56 62	53 57
	T-45 PL75 + 2 x 15 MW	2 x 15	26	1.20	1.30	100 200	19 17	19 16	57 63	55 59

High performance solutions

Pladur® **OMNIA** is the **Pladur®** high-performance board that meets the most demanding requirements (type D, R, I, F, H1 as per EN standard 520).

Easy to choose and it provides all the necessary properties in a single board, simplifying building site and warehouse management.

PLADUR® by etex

OMNIA

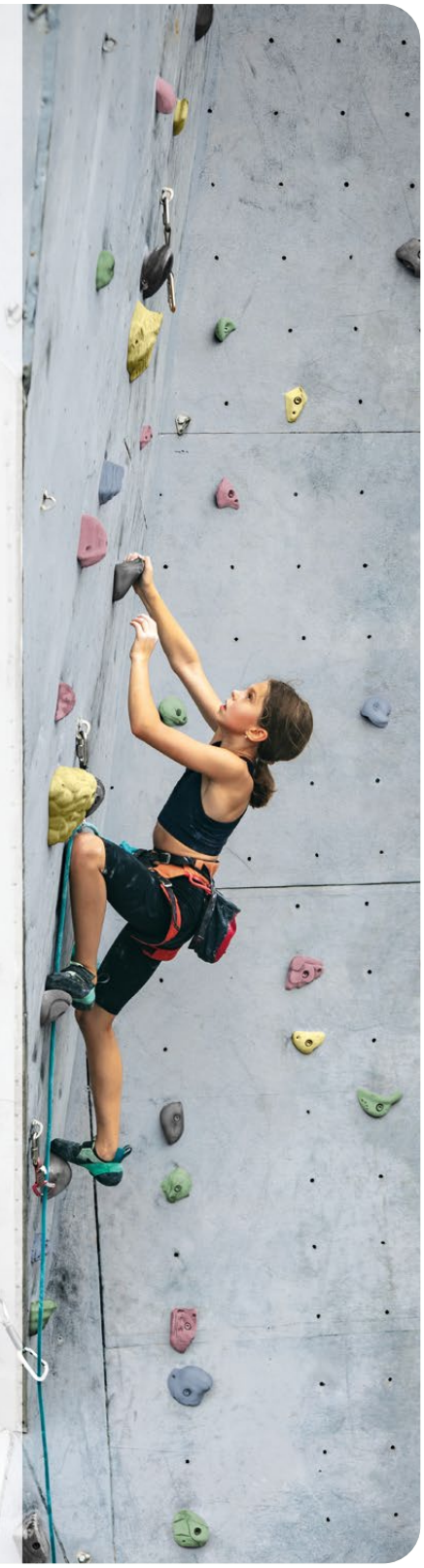
Pladur® board

One plasterboard for every job

What would happen if a single board had all the most demanded features?

Pladur® **OMNIA**, combines **the most demanded characteristics in a single plasterboard,** so it can be installed in wet areas, spaces that require surface hardness together with fire resistance, and areas where greater acoustic insulation is needed, and now also **with certified loads!**

For this reason, Pladur® **OMNIA makes it easier to select a board and simplify installation on site, ensuring that you always get it right.**



HUMID ZONES

Ideal for installation in damp areas such as bathrooms and kitchens (type H1)

SURFACE HARDNESS

It is a high-density board with high surface hardness

FIRE RESISTANCE

EI 180

It has the same fire resistance certification as Pladur® F board

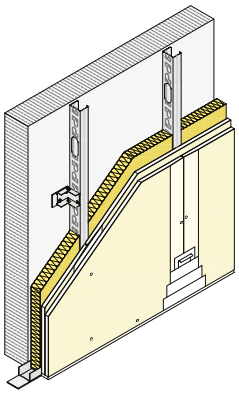
ACOUSTIC INSULATION

Higher level of acoustic insulation than the N board (+3db)

CERTIFIED LOAD CAPACITY

Kg

Up to 50 kg with a single board
Up to 80 kg with two boards



INDEPENDENT

PLADUR® STUD WALL LINING

SYSTEM DEFINITION

Independent wall lining consisting of a frame made from alvanized steel plate profiles, using **Pladur®** studs and **Pladur®** U-tracks (horizontal elements), whose inner side, depending on the height being covered, requires bracing for the studs using angle profiles that attach the core of the studs to the load-bearing wall, leaving a minimum space of 10 mm between the frame and the wall. One or more **Pladur®** boards are screwed to the external side of this frame.

FIELD OF APPLICATION

Lining for interior and façade walls to increase thermal and acoustic insulation. It is used on all kinds of work, although it is especially indicated for new buildings, refurbishment and rehabilitation.

Profile	System	Boards	Surface mass (kg/m²)	Distance between bracing				Acoustic insulation (dBA)					Fire resistance[1]	
				]		][		Load-bearing wall. Surface mass (kg/m²)	Wall lining increase		Lload bearing wall + wall lining		Two-way classification	
				600	400	600	400		ΔR_A	$\Delta R_{A,tr}$	R_A	$R_{A,tr}$	N HI I	F O
M 48-35 Pladur® stud	60.5 (48-35) MW	[48 + 1x12.5]	12	-	2.35*	-	2.80*	100	15	11	53	47	S/E	S/E
	63 (48-35) MW	[48 + 1x15]	16	2.15	2.35	2.55	2.80	100	17	15	55	51	S/E	S/E
	66 (48-35) MW	[48 + 1x18]	18	2.30	2.55	2.75	3.00	100	17	15	55	51	S/E	Not applicable
	73 (48-35) MW	[48 + 2x12.5]	23	2.55	2.80	3.05	3.35	100	19	17	57	53	EI 30[4][6]	EI 30[4][6]
	78 (48-35) MW	[48 + 2x15]	27	2.55	2.80	3.05	3.35	100	19	18	57	54	EI 30[4][6]	EI 60[4]
	93 (48-35) MW	[48 + 3x15]	38	2.85	3.15	3.40	3.75	100	21	20	59	56	EI 30[4][6]	EI 90[4]
M 48-45 XL Pladur® stud	60.5 (48-45) MW	[48 + 1x12.5]	12	-	2.50*	-	2.95*	100	15	11	53	47	S/E	S/E
	63 (48-45) MW	[48 + 1x15]	16	2.25	2.50	2.65	2.95	100	17	15	55	51	S/E	S/E
	66 (48-45) MW	[48 + 1x18]	18	2.40	2.65	2.85	3.15	100	17	15	55	51	S/E	Not applicable
	73 (48-45) MW	[48 + 2x12.5]	23	2.70	2.95	3.20	3.50	100	19	17	57	53	EI 30[4][6]	EI 30[4][6]
	78 (48-45) MW	[48 + 2x15]	27	2.70	2.95	3.20	3.50	100	19	18	57	54	EI 30[4][6]	EI 60[4]
	93 (48-45) MW	[48 + 3x15]	38	3.00	3.30	3.55	3.95	100	21	20	59	56	EI 30[4][6]	EI 90[4]
M 48-45 XL Pladur® stud	77 (62-45) MW	[62 + 1x15]	17	2.60	2.85	3.10	3.40	100	17	15	55	51	S/E	S/E
	80 (62-45) MW	[62 + 1x18]	19	2.80	3.10	3.30	3.65	100	17	15	55	51	S/E	Not applicable
	87 (62-45) MW	[62 + 2x12.5]	24	3.10	3.40	3.70	4.05	100	19	17	57	53	EI 30[4][6]	EI 30[4][6]
	92 (62-45) MW	[62 + 2x15]	28	3.10	3.40	3.70	4.05	100	19	18	57	54	EI 30[4][6]	EI 60[4]
	107 (62-45) MW	[62 + 3x15]	39	3.45	3.85	4.10	4.55	100	21	20	59	56	EI 30[4][6]	EI 90[4]
M 70-35 Pladur® stud	85 (70-35) MW	[70 + 1x15]	17	2.70	3.00	3.20	3.55	100	18	17	56	53	S/E	S/E
	88 (70-35) MW	[70 + 1x18]	19	2.90	3.20	3.45	3.80	100	18	17	56	53	S/E	Not applicable
	95 (70-35) MW	[70 + 2x12.5]	24	3.20	3.55	3.80	4.20	100	19	19	57	55	EI 30[4][6]	EI 30[4][6]
	100 (70-35) MW	[70 + 2x15]	28	3.20	3.55	3.80	4.20	100	20	19	58	55	EI 30[4][6]	EI 60[4]
	115 (70-35) MW	[70 + 3x15]	39	3.60	3.95	4.25	4.70	100	21	21	59	57	EI 30[4][6]	EI 90[4]

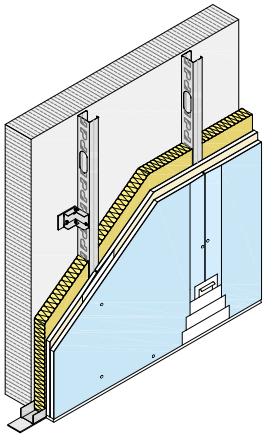
(1) The fire resistance of these systems remains valid up to a maximum height of **4.0 m** in accordance with EN standard 1364-1.
* Only refurbishment

N Pladur® **N** board HI Pladur® **HI** board I Pladur® **I** board F Pladur® **F** board O Pladur® **OMNIA** board

Profile	System	Boards	Surface mass (kg/m²)	Distance between bracing				Acoustic insulation (dBA)					Fire resistance[1]	
				]		][		Load-bearing wall. Surface mass (kg/m²)	Wall lining increase		Lload bearing wall + wall lining		Two-way classification	
				600	400	600	400		ΔR_A	$\Delta R_{A,tr}$	R_A	$R_{A,tr}$	N HI I	F O
M 70-45 XL Pladur® stud	85 (70-45) MW	[70 + 1X15]	17	2.80	3.10	3.35	3.70	100	18	17	56	53	S/E	S/E
	88 (70-45) MW	[70 + 1x18]	19	3.00	3.35	3.60	3.95	100	18	17	56	53	S/E	Not applicable
	95 (70-45) MW	[70 + 2x12.5]	24	3.35	3.70	4.00	4.40	100	19	19	57	55	EI 30[4][6]	EI 30[4][6]
	100 (70-45) MW	[70 + 2x15]	28	3.35	3.70	4.00	4.40	100	20	19	58	55	EI 30[4][6]	EI 60[4]
	115 (70-45) MW	[70 + 3x15]	39	3.75	4.15	4.45	4.95	100	21	21	59	57	EI 30[4][6]	EI 90[4]
M 90-45 XL Pladur® stud	105 (90-45) MW	[90+1x15]	18	3.20	3.55	3.80	4.20	100	18	17	56	53	S/E	S/E
	108 (90-45) MW	[90+1x18]	20	3.45	3.80	4.10	4.50	100	18	17	56	53	S/E	Not applicable
	115 (90-45) MW	[90 + 2x12.5]	25	3.80	4.25	4.55	5.05	100	20	19	58	55	EI 30[4][6]	EI 30[4][6]
	120 (90-45) MW	[90 + 2x15]	29	3.80	4.25	4.55	5.05	100	20	20	58	56	EI 30[4][6]	EI 60[4]
	135 (90-45) MW	[90 + 3x15]	40	4.30	4.75	5.10	5.65	100	21	21	59	57	EI 30[4][6]	EI 90[4]
M 90 Pladur® stud	105 (90) MW	[90+1x15]	18	3.25	3.60	3.90	4.30	100	18	17	56	53	S/E	S/E
	108 (90) MW	[90+1x18]	20	3.50	3.85	4.15	4.60	100	18	17	56	53	S/E	Not applicable
	115 (90) MW	[90 + 2x12.5]	25	3.90	4.30	4.60	5.10	100	20	19	58	55	EI 30[4][6]	EI 30[4][6]
	120 (90) MW	[90 + 2x15]	29	3.90	4.30	4.60	5.10	100	20	20	58	56	EI 30[4][6]	EI 60[4]
	135 (90) MW	[90 + 3x15]	40	4.35	4.80	5.15	5.70	100	21	21	59	57	EI 30[4][6]	EI 90[4]
M 100-45 XL Pladur® stud	115 (100-45) MW	[100+1x15]	18	3.40	3.75	4.05	4.50	100	18	17	56	53	S/E	S/E
	118 (100-45) MW	[100+1x18]	20	3.65	4.05	4.35	4.80	100	18	17	56	53	S/E	Not applicable
	125 (100-45) MW	[100 + 2x12.5]	25	4.05	4.50	4.85	5.35	100	20	19	58	55	EI 30[4][6]	EI 30[4][6]
	130 (100-45) MW	[100 + 2x15]	29	4.05	4.50	4.85	5.35	100	20	20	58	56	EI 30[4][6]	EI 60[4]
	145 (100-45) MW	[100 + 3x15]	40	4.55	5.05	5.40	6.00	100	21	21	59	57	EI 30[4][6]	EI 90[4]
M 125-45 XL Pladur® stud	140 (125-45) MW	[125+1x15]	18	3.90	4.30	4.60	5.10	100	18	17	56	53	S/E	S/E
	143 (125-45) MW	[125+1x18]	20	4.15	4.60	4.95	5.45	100	18	17	56	53	S/E	Not applicable
	150 (125-45) MW	[125 + 2x12.5]	27	4.60	5.10	5.50	6.10	100	20	19	58	55	EI 30[4][6]	EI 30[4][6]
	155 (125-45) MW	[125 + 2x15]	31	4.60	5.10	5.50	6.10	100	20	20	58	56	EI 30[4][6]	EI 60[4]
	170 (125-45) MW	[125 + 3x15]	42	5.15	5.70	6.15	6.80	100	21	21	59	57	EI 30[4][6]	EI 90[4]

(1) The fire resistance of these systems remains valid up to a maximum height of **4.0 m** in accordance with EN standard 1364-1.

N Pladur® **N** board HI Pladur® **HI** board I Pladur® **I** board F Pladur® **F** board O Pladur® **OMNIA** board



INDEPENDENT

PLADUR® OMNIA STUD WALL LINING WITH LOADS

SYSTEM DEFINITION

Independent wall lining consisting of a frame made from galvanised steel plate profiles, using **Pladur®** studs and **Pladur®** U-tracks (horizontal elements), whose inner side, depending on the height being covered, requires bracing for the studs using angle profiles that attach the core of the studs to the load-bearing wall, leaving a minimum space of 10 mm between the frame and the wall. One or two Pladur® **OMNIA** boards, being the outer or both boards, are screwed to the external side of this frame.

FIELD OF APPLICATION

Exclusively for use in interiors. Wall linings with diverse requirements: need for high load resistance, zones potentially exposed to impact or high footfall areas and premises with average humidity.

Profile	System	Boards	Surface mass (kg/m²)	Type of loads[1]	Maximum height (m)				Acoustic insulation (dBA)				
									Load-bearing wall. Surface mass (kg/m²)	Wall lining increase		Lload bearing wall + wall lining	
					600	400	600	400		ΔR_A	$\Delta R_{A,tr}$	R_A	$R_{A,tr}$
M 48-45 Pladur® stud	60,5 (48-35) MW	[48+1x12.5]	16	Light	-	2.35*	-	2.80*	100	15	11	53	47
				Medium	-	2.10*	-	2.60*					
				Heavy	-	1.60*	-	2.35*					
	63 (48-35) MW	[48+1x15]	21	Light	2.15	2.35	2.55	2.80	100	17	15	55	51
				Medium	1.80	2.10	2.30	2.60					
				Heavy	-	1.60	1.95	2.35					
	73 (48-35) MW	[48+2x12.5]	31	Light	2.55	2.80	3.05	3.35	100	19	17	57	53
				Medium	2.30	2.60	2.85	3.20					
				Heavy	1.95	2.35	2.65	3.00					
	78 (48-35) MW	[48+2x15]	36	Light	2.55	2.80	3.05	3.35	100	19	18	57	54
				Medium	2.30	2.60	2.85	3.20					
				Heavy	1.95	2.35	2.65	3.00					
M 48-45 XL Pladur® stud	60,5 (48-45) MW	[48+1x12.5]	16	Light	-	2.50*	-	2.95*	100	15	11	53	47
				Medium	-	2.25*	-	2.75*					
				Heavy	-	1.85*	-	2.55*					
	63 (48-45) MW	[48+1x15]	21	Light	2.25	2.50	2.65	2.95	100	17	15	55	51
				Medium	1.95	2.25	2.45	2.75					
				Heavy	-	1.85	2.15	2.55					
	73 (48-45) MW	[48+2x12.5]	31	Light	2.70	2.95	3.20	3.50	100	19	17	57	53
				Medium	2.45	2.80	3.00	3.35					
				Heavy	2.15	2.55	2.80	3.20					
	78 (48-45) MW	[48+2x15]	36	Light	2.70	2.95	3.20	3.50	100	19	18	57	54
				Medium	2.45	2.80	3.00	3.35					
				Heavy	2.15	2.55	2.80	3.20					
M 62-45 XL Pladur® stud	77 (62-45) MW	[62+1x15]	22	Light	2.60	2.85	3.10	3.40	100	17	15	55	51
				Medium	2.35	2.70	2.90	3.25					
				Heavy	2.05	2.45	2.70	3.10					
	87 (62-45) MW	[62+2x12.5]	32	Light	3.10	3.40	3.70	4.05	100	19	17	57	53
				Medium	2.90	3.25	3.55	3.95					
				Heavy	2.70	3.10	3.35	3.80					
	92 (62-45) MW	[62+2x15]	37	Light	3.10	3.40	3.70	4.05	100	19	18	57	54
				Medium	2.90	3.25	3.55	3.95					
				Heavy	2.70	3.10	3.35	3.80					

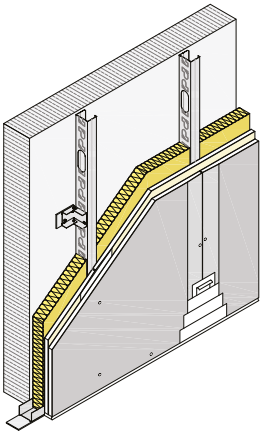
*Only refurbishment.
(1) Light loads without eccentricity: up to 75 kg/m², according to UNE standard 102043.
Medium loads without eccentricity: up to 112.5 kg/m², according to report E-113801-001.
Heavy loads without eccentricity: up to 150 kg/m², according to report E-113801-001.

To justify the calculation and type of loads, consult our Omnia documentation.

Profile	System	Boards	Surface mass (kg/m²)	Type of loads[1]	Maximum height (m)				Acoustic insulation (dBA)				
					]		][		Load-bearing wall. Surface mass (kg/m²)	Wall lining increase		Lload bearing wall + wall lining	
					600	400	600	400		ΔR_A	$\Delta R_{A,tr}$	R_A	$R_{A,tr}$
M 70-35 Pladur® stud	85 (70-35) MW	[70+1x15]	22	Light	2.70	3.00	3.20	3.55	100	18	17	56	53
				Medium	2.45	2.80	3.00	3.40					
				Heavy	2.15	2.55	2.80	3.20					
	95 (70-35) MW	[70+2x12.5]	32	Light	3.20	3.55	3.80	4.20	100	19	19	57	55
				Medium	3.05	3.40	3.65	4.10					
				Heavy	2.85	3.25	3.50	3.95					
	100 (70-35) MW	[70+2x15]	37	Light	3.20	3.55	3.80	4.20	100	20	19	58	55
				Medium	3.05	3.40	3.65	4.10					
				Heavy	2.85	3.25	3.50	3.95					
M 70-45 XL Pladur® stud	85 (70-45) MW	[70+1x15]	22	Light	2.80	3.10	3.35	3.70	100	18	17	56	53
				Medium	2.60	2.95	3.20	3.55					
				Heavy	2.35	2.75	3.00	3.40					
	95 (70-45) MW	[70+2x12.5]	32	Light	3.35	3.70	4.00	4.40	100	19	19	57	55
				Medium	3.20	3.55	3.85	4.30					
				Heavy	3.00	3.40	3.70	4.15					
	100 (70-45) MW	[70+2x15]	37	Light	3.35	3.70	4.00	4.40	100	20	19	58	55
				Medium	3.20	3.55	3.85	4.30					
				Heavy	3.00	3.40	3.70	4.15					
M 90-45 XL Pladur® stud	105 (90-45) MW	[90+1x15]	23	Light	3.20	3.55	3.80	4.20	100	18	17	56	53
				Medium	3.05	3.40	3.70	4.10					
				Heavy	2.85	3.25	3.55	3.95					
	115 (90-45) MW	[90+2x12.5]	33	Light	3.80	4.25	4.55	5.05	100	20	19	58	55
				Medium	3.70	4.10	4.45	4.90					
				Heavy	3.55	3.95	4.30	4.80					
	120 (90-45) MW	[90+2x15]	38	Light	3.80	4.25	4.55	5.05	100	20	20	58	56
				Medium	3.70	4.10	4.45	4.90					
				Heavy	3.55	3.95	4.30	4.80					
M 100-45 XL Pladur® stud	115 (100-45) MW	[100+1x15]	23	Light	3.40	3.75	4.05	4.50	100	18	17	59	53
				Medium	3.25	3.65	3.95	4.35					
				Heavy	3.05	3.50	3.80	4.25					
	125 (100-45) MW	[100+2x12.5]	33	Light	4.05	4.50	4.80	5.35	100	20	19	58	55
				Medium	3.95	4.40	4.70	5.25					
				Heavy	3.80	4.25	4.60	5.15					
	130 (100-45) MW	[100+2x15]	38	Light	4.05	4.50	4.80	5.35	100	20	20	58	56
				Medium	3.95	4.40	4.70	5.25					
				Heavy	3.80	4.25	4.60	5.15					
M 125-45 XL Pladur® stud	140 (125-45) MW	[125+1x15]	25	Light	3.85	4.30	4.60	5.10	100	18	17	56	53
				Medium	3.75	4.20	4.50	5.00					
				Heavy	3.60	4.05	4.40	4.90					
	150 (125-45) MW	[125+2x12.5]	35	Light	4.60	5.10	5.50	6.05	100	20	19	58	55
				Medium	4.50	5.00	5.40	6.00					
				Heavy	4.40	4.90	5.30	5.90					
	155 (125-45) MW	[125+2x15]	40	Light	4.60	5.10	5.50	6.05	100	20	20	58	56
				Medium	4.50	5.00	5.40	6.00					
				Heavy	4.40	4.90	5.30	5.90					

*Only refurbishment.
(1) Light loads without eccentricity: up to 75 kg/m², according to UNE standard 102043.
Medium loads without eccentricity: up to 112.5 kg/m², according to report E-113801-001.
Heavy loads without eccentricity: up to 150 kg/m², according to report E-113801-001.

To justify the calculation and type of loads, consult our Omnia documentation.



INDEPENDENT

PLADUR® SOLIDTEX STUD WALL LINING WITH LOADS

SYSTEM DEFINITION

Independent wall lining consisting of a frame made from galvanised steel plate profiles, using **Pladur®** studs and **Pladur®** U-tracks (horizontal elements), whose inner side, depending on the height being covered, requires bracing for the studs using angle profiles that attach the core of the studs to the load-bearing wall, leaving a minimum space of 10 mm between the frame and the wall. One or two Pladur® **SOLIDTEX** boards, being the outer or both boards, are screwed to the external side of this frame.

FIELD OF APPLICATION

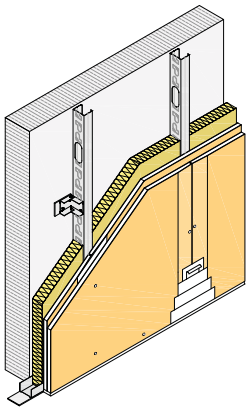
Exclusively for use in interiors. Wall linings with diverse requirements: need for high load resistance, zones potentially exposed to impact or high footfall areas and premises with average humidity.

Profile	System	Boards	Surface mass (kg/m²)	Type of loads[1]	Maximum height (m)				Acoustic insulation (dBA)				
					]		][		Load-bearing wall. Surface mass (kg/m²)	Wall lining increase		Lload bearing wall + wall lining	
					600	400	600	400		ΔR_A	$\Delta R_{A,tr}$	R_A	$R_{A,tr}$
M 48-35 Pladur® stud	60,5 (48-35) MW	[48 + 1x12.5]	18	Light	-	2.35*	-	2.80*	100	15	11	53	47
				Medium	-	2.10*	-	2.60*					
				Heavy	-	1.60*	-	2.35*					
	73 (48-35) MW	[48 + 2x12.5]	36	Light	2.55	2.80	3.05	3.35	100	19	17	57	53
				Medium	2.30	2.60	2.85	3.20					
				Heavy	1.95	2.35	2.65	3.00					
M 48-45 XL Pladur® stud	73 (48-45) MW	[48 + 2x12.5]	36	Light	2.70	2.95	3.20	3.50	100	19	17	57	53
				Medium	2.45	2.80	3.00	3.35					
				Heavy	2.15	2.55	2.80	3.20					
M 62-45 XL Pladur® stud	87 (62-45) MW	[62 + 2x12.5]	37	Light	3.10	3.40	3.70	4.05	100	19	17	57	53
				Medium	2.90	3.25	3.55	3.95					
				Heavy	2.70	3.10	3.35	3.80					
M 70-35 Pladur® stud	95 (70-35) MW	[70 + 2x12.5]	37	Light	3.20	3.55	3.80	4.20	100	19	19	57	55
				Medium	3.05	3.40	3.65	4.10					
				Heavy	2.85	3.25	3.50	3.95					
M 70-45 XL Pladur® stud	95 (70-45) MW	[70 + 2x12.5]	37	Light	3.35	3.70	4.00	4.40	100	19	19	57	55
				Medium	3.20	3.55	3.85	4.30					
				Heavy	3.00	3.40	3.70	4.15					
M 90-45 XL Pladur® stud	115 (90-45) MW	[90 + 2x12.5]	38	Light	3.80	4.25	4.55	5.05	100	20	19	58	55
				Medium	3.70	4.10	4.45	4.90					
				Heavy	3.55	3.95	4.30	4.80					
M 100-45 XL Pladur® stud	125 (100-45) MW	[100 + 2x12.5]	38	Light	4.05	4.50	4.80	5.35	100	20	19	58	55
				Medium	3.95	4.40	4.70	5.25					
				Heavy	3.80	4.25	4.60	5.15					
M 100-45 XL Pladur® stud	150 (125-45) MW	[125 + 2x12.5]	40	Light	4.60	5.10	5.50	6.05	100	20	19	58	55
				Medium	4.50	5.00	5.40	6.00					
				Heavy	4.40	4.90	5.30	5.90					

*Only refurbishment.

(1) Light loads without eccentricity: up to 75 kg/m², according to UNE standard 102043.
Medium loads without eccentricity: up to 112.5 kg/m², according to report E-088220-001.
Heavy loads without eccentricity: up to 150 kg/m², according to report E-088220-001.

To justify the calculation and type of loads, consult our Solidtex documentation.



INDEPENDENT

PLADUR® WAB STUD WALL LINING

SYSTEM DEFINITION

Independent wall lining consisting of a frame made from **Z5** galvanised steel plate profiles, using Pladur® **XL** studs and Pladur® **XL** U-tracks (horizontal elements), whose inner side, depending on the height being covered, requires bracing for the studs using angle profiles that attach the core of the studs to the load-bearing wall, leaving a minimum space of 10 mm between the frame and the wall. Two Pladur® **WAB** boards, being the outer or both boards, are screwed to the external side of this frame.

FIELD OF APPLICATION

Lining for interior and façade walls to increase thermal and acoustic insulation, exposed to high humidity.

Profile	System	Boards	Surface mass (kg/m²)	Maximum height (m)				Acoustic insulation (dBA)				
				]		][		Load-bearing wall. Surface mass (kg/m²)	Wall lining increase		Lload bearing wall + wall lining	
				600	400	600	400		ΔR_A	$\Delta R_{A,tr}$	R_A	$R_{A,tr}$
M 48-45 XL Z5 Pladur® stud	73 (48-45) MW	[48+2x12.5]	28	2.70	2.95	3.20	3.50	100	19	17	57	53
M 70-45 XL Z5 Pladur® stud	95 (70-45) MW	[70+2x12.5]	29	3.35	3.70	4.00	4.40	100	19	19	57	55

PLADUR® by etex

Pladur® **WAB** interior partitions, lining and ceilings

HIGH HUMIDITY

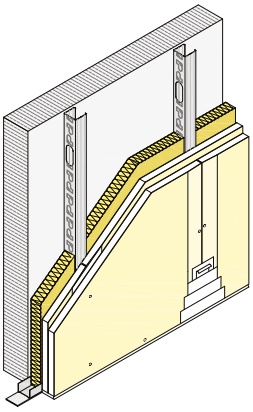
Pladur® **WAB** interior partitions, lining, and ceilings have been designed for optimal performance in **interior area**s with a risk of condensation and **high humidity**, such as **swimming pools, spas, changing rooms,** or any other area where increased protection is required.

HIGH RESISTANCE TO HUMIDITY

RESISTANT TO BACTERIA AND MOLD

CERTIFIED QUALITY

CORROSION PROTECTION UP TO 500H



INDEPENDENT

PLADUR® MAGNA STUD WALL LINING

SYSTEM DEFINITION

An independent wall lining, consisting of a frame made from galvanised steel plate profiles, using **Pladur®** studs spaced at 900 mm or 450 mm intervals (vertical elements) and **Pladur®** U-tracks (horizontal elements), leaving a minimum space of 10 mm between the frame and the load-bearing wall. One or more Pladur® **MAGNA** boards are screwed to the external side of this frame.

FIELD OF APPLICATION

Lining for internal and façade walls to increase thermal and acoustic insulation. It offers high performance for fire resistance and mechanical resistance.

Profile	System	Boards	Surface mass (kg/m²)	Maximum height (m)				Acoustic insulation (dBA)					Fire resistance[1]
								Load-bearing wall. Surface mass (kg/m²)	Wall lining increase		Lload bearing wall + wall lining		Two-way classification
				900	450	900	450		ΔR_A	$\Delta R_{A,tr}$	R_A	$R_{A,tr}$	Ⓜ Ⓜ
M 48-35 Pladur® stud	66 (48-35) MW	[48 + 1x18]	19	-	2.45	-	2.90	250	13.2	9.0	62.5	52.9	S/E
	73 (48-35) MW	[48 + 1x25]	24	-	2.70	-	3.25	250	15.0	10.9	64.3	54.8	S/E
	98 (48-35) MW	[48 + 2x25]	45	-	3.05	-	3.60	250	22.2	18.2	71.5	62.1	EI 120[4,5]
M 48-45 XL Pladur® stud	66 (48-45) MW	[48 + 1x18]	20	2.10	2.55	2.45	3.05	250	13.2	9.0	62.5	52.9	S/E
	73 (48-45) MW	[48 + 1x25]	24	2.15	2.85	2.55	3.40	250	15.0	10.9	64.3	54.8	S/E
	98 (48-45) MW	[48 + 2x25]	45	-	3.20	-	3.80	250	22.2	18.2	71.5	62.1	EI 120[4,5]
M 62-45 XL Pladur® stud	80 (62-45) MW	[62 + 1x18]	20	2.40	2.95	2.85	3.55	250	13.2	9.0	62.5	52.9	S/E
	87 (62-45) MW	[62 + 1x25]	25	2.50	3.30	2.95	3.90	250	15.0	10.9	64.3	54.8	S/E
	112 (62-45) MW	[62 + 2x25]	45	-	3.70	-	4.40	250	22.2	18.2	71.5	62.1	EI 120[4,5]
M 70-35 Pladur® stud	88 (70-35) MW	[70 + 1x18]	20	-	3.05	-	3.65	250	13.2	9.0	62.5	52.9	S/E
	95 (70-35) MW	[70 + 1x25]	25	-	3.40	-	4.05	250	15.0	10.9	64.3	54.8	S/E
	120 (70-35) MW	[70 + 2x25]	46	-	3.85	-	4.55	250	22.2	18.2	71.5	62.1	EI 120[4,5]
M 70-45 XL Pladur® stud	88 (70-45) MW	[70 + 1x18]	21	2.60	3.20	3.10	3.85	250	13.2	9.0	62.5	52.9	S/E
	95 (70-45) MW	[70 + 1x25]	25	2.70	3.55	3.20	4.25	250	15.0	10.9	64.3	54.8	S/E
	120 (70-45) MW	[70 + 2x25]	46	-	4.00	-	4.75	250	22.2	18.2	71.5	62.1	EI 120[4,5]
M 90-45 XL Pladur® stud	108 (90-45) MW	[90 + 1x18]	21	2.95	3.65	3.50	4.35	250	20.0	16.0	69.3	59.9	S/E
	115 (90-45) MW	[90 + 1x25]	26	3.10	4.10	3.65	4.85	250	21.6	17.7	70.9	61.1	S/E
	140 (90-45) MW	[90 + 2x25]	47	-	4.55	-	5.45	250	27.5	24.0	76.8	67.9	EI 120[4,5]
M 100-45 XL Pladur® stud	118 (100-45) MW	[100 + 1x18]	22	3.15	3.90	3.75	4.65	250	20.0	16.0	69.3	59.9	S/E
	125 (100-45) MW	[100 + 1x25]	26	3.25	4.35	3.90	5.15	250	21.6	17.7	70.9	61.1	S/E
	150 (100-45) MW	[100 + 2x25]	47	-	4.85	-	5.80	250	27.5	24.0	76.8	67.9	EI 120[4,5]
M 100-45 XL Pladur® stud	143 (125-45) MW	[125 + 1x18]	22	3.60	4.45	4.25	5.30	250	20.0	16.0	69.3	59.9	S/E
	150 (125-45) MW	[125 + 1x25]	27	3.70	4.95	4.45	5.90	250	21.6	17.7	70.9	61.1	S/E
	175 (125-45) MW	[125 + 2x25]	48	-	5.55	-	6.60	250	27.5	24.0	76.8	67.9	EI 120[4,5]

(1) The fire resistance of these systems remains valid up to a maximum height of **4.0 m** in accordance with EN standard 1364-1.

TECHNICAL NOTES AND CONSIDERATIONS

MECHANICAL RESISTANCE:
Distance between bracing: For heights over 5 m in direct wall lining, and 3.60 m for direct wall lining with Pladur **ENAIRGY ISOPOP®**.

In wall lining panels indicated for refurbishment with a single 12.5 mm board, stud distance on centre is 400 mm.

The surface mass indicated in the tables is based on systems with Pladur® **N**, Pladur® **SOLIDTEX**, Pladur® **OMNIA**, Pladur® **WAB** or Pladur® **MAGNA** boards, depending on the corresponding system.

ACOUSTIC INSULATION:
The acoustic insulation values for systems with 18 mm boards are based on systems with 19 mm boards.

FIRE RESISTANCE:
Please, pay attention to test certificate execution condition.

Pladur® wall lining fire classifications are two-way. S/E: Classification untested.

(4) **Pladur®** wall lining systems fire classification with 400 mm on centres.

(4,5) Pladur® **MAGNA** wall lining systems fire classification with 450 mm on centres.

(6) **Pladur®** wall lining systems fire classification with 600 mm on centres.

Not applicable There is no Pladur® 18 mm **F** board.

Wall lining and partition wall systems with Pladur® **H1** and I boards obtain the same fire resistance classification as in tests performed on the Pladur® **N** board. The results may be extrapolated if the direct field of application in the standard permits and in accordance with the extension reports.

Wall lining, partition wall and ceiling systems with Pladur® **OMNIA** boards can assume the same fire resistance classification as the Pladur® **F** board performance test. The results may be extrapolated if indicated in the building code norm and in accordance with the extension report.

Wall lining and partition wall systems with Pladur® **F** and **OMNIA** can assume the same fire resistance classification as the Pladur® **N** board performance test. The results may be extrapolated if indicated in the building code norm and in accordance with the extension report.

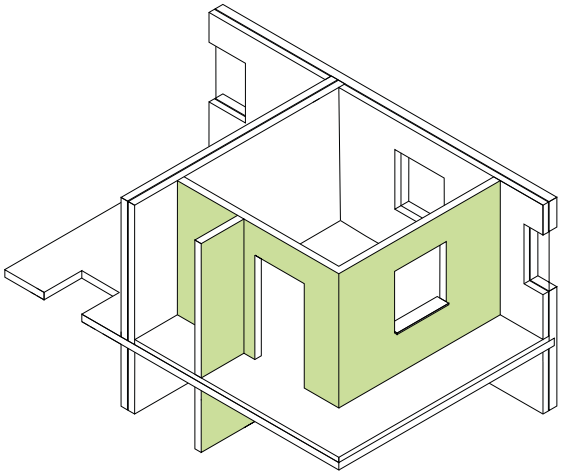
Wall lining, partition and ceiling systems with Pladur® **MAGNA H1** boards obtain the same fire resistance classification as in tests performed with Pladur® **MAGNA** boards. The results may be extrapolated if the direct field of application in the standard permits and in accordance with the extension report.

THERMAL INSULATION:
MW: Mineral wool (both glass wool and rock wool) with a U-value of λ = 0,036 W/mK and variable thickness, required to fill the profile core.

SYSTEM CONFIGURATION:
Independent wall lining systems require a minimum distance of 10 mm from the load-bearing wall.

Ⓜ Pladur® **MAGNA** board Ⓜ Pladur® **MAGNA H1** board

PARTITION WALLS

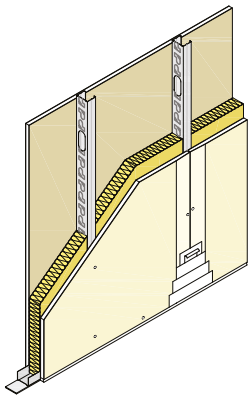


PARTITION WALLS

These are partitions comprised of a single metal frame to which one or more boards are screwed on each side of the frame. **Pladur®** partition walls are mainly used to **divide spaces within a same house, office or premise**.

Also included in this category are EI-180 high fire protection partitions

- QUICK INSTALLATION
- 100 QUALITY CERTIFIED PLASTER
- FIRE RESISTANCE
- LIGHT SYSTEMS



SINGLE FRAME

PLADUR® SINGLE LAYER PARTITION

SYSTEM DEFINITION

Partition wall consisting of one **Pladur®** board screwed to one side of a galvanised steel frame, built from **Pladur®** studs (vertical elements) and **Pladur®** U-tracks (horizontal elements).

FIELD OF APPLICATION

Interior distribution walls in a single unit of use.

Profile	System	Boards	Mass (kg/m²)	Maximum height (m)				Thermal resistance m²K/W	Acoustic insulation		Fire resistance[1]	
				]		][			R_A (dBA)	R_W (C, C_{tr}) (dB)	N HI I	F O
				600	400	600	400					
M 48-35 Pladur® stud	73 (48-35) MW	[1x12.5 + 48 + 1x12.5]	25	-	2.80*	-	3.35*	1.61	39.5	40 (-2, -8)	S/E	S/E
	78 (48-35) MW	[1x15 + 48 + 1x15]	26	2.60	2.80	3.05	3.35	1.63	43.5	46 (-3, -8)	EI 30	EI 60
	84 (48-35) MW	[1x18 + 48 + 1x18]	33	2.85	3.15	3.40	3.75	1.65	44	47 (-4, -11)	EI 30	Not applicable
M 48-45 XL Pladur® stud	73 (48-45) MW	[1x12.5 + 48 + 1x12.5]	25	-	2.95*	-	3.50*	1.61	39.5	40 (-2, -8)	S/E	S/E
	78 (48-45) MW	[1x15 + 48 + 1x15]	26	2.70	2.95	3.20	3.50	1.63	43.5	46 (-3, -8)	EI 30	EI 60
	84 (48-45) MW	[1x18 + 48 + 1x18]	33	3.00	3.30	3.55	3.95	1.65	44	47 (-4, -11)	EI 30	Not applicable
M 62-45 XL Pladur® stud	92 (62-45) MW	[1x15 + 62 + 1x15]	26	3.10	3.40	3.70	4.05	1.92	43.5	46 (-3,-8)	EI 30	EI 60
	98 (62-45) MW	[1x18 + 62 + 1x18]	33	3.45	3.85	4.10	4.55	1.94	44	47 (-4, -11)	EI 30	Not applicable
M 70-35 Pladur® stud	100 (70-35) MW	[1x15 + 70 + 1x15]	26	3.20	3.55	3.80	4.20	2.18	46.9	48 (-1, -5)	EI 30	EI 60
	106 (70-35) MW	[1x18 + 70 + 1x18]	33	3.60	3.95	4.25	4.70	2.20	46	47 (-2, -5)	EI 30	Not applicable
M 70-45 XL Pladur® stud	100 (70-45) MW	[1x15 +70 +1x15]	26	3.35	3.70	4.00	4.40	2.18	46.9	48 (-1, -5)	EI 30	EI 60
	106 (70-45) MW	[1x18 +70 +1x18]	33	3.75	4.15	4.45	4.95	2.20	46	47 (-2, -5)	EI 30	Not applicable

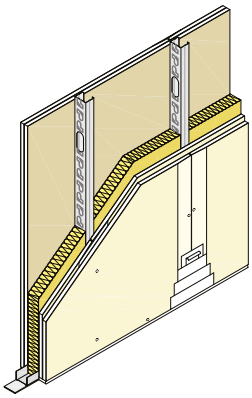
(1) Fire resistance **EI 30** test remains valid up to a maximum height of **5.0 m** in accordance with EN standard 15254-3.
Fire resistance **EI 60** test remains valid up to a maximum height of **4.0 m** in accordance with EN standard 1364-1.

*Only refurbishment.

N Pladur® **N** board HI Pladur® **H1** board I Pladur® **I** board F Pladur® **F** board O Pladur® **OMNIA** board

Profile	System	Boards	Mass (kg/m²)	Maximum height (m)				Thermal resistance m²K/W	Acoustic insulation		Fire resistance[1]	
				]		][			R_A (dBA)	R_w (C, C_{tr}) (dB)	N HI I	F O
				600	400	600	400					
M 90-45 XL Pladur® stud	120 (90-45) MW	[1x15 + 90 + 1x15]	28	3.80	4.25	4.55	5.05	2.73	48	50 (-3, -9)	EI 30	EI 60
	126 (90-45) MW	[1x18 + 90 + 1x18]	35	4.30	4.75	5.10	5.65	2.75	49	51 (-3, -7)	EI 30	Not applicable
M 90 Pladur® stud	120 (90) MW	[1x15 + 90 + 1x15]	28	3.90	4.30	4.60	5.10	2.73	48	50 (-3, -9)	EI 30	EI 60
	126 (90) MW	[1x18 + 90 + 1x18]	35	4.35	4.80	5.15	5.70	2.75	49	51 (-3, -7)	EI 30	Not applicable
M 100-45 XL Pladur® stud	130 (100-45) MW	[1x15 + 100 + 1x15]	28	4.05	4.50	4.85	5.35	2.90	48	50 (-3, -9)	EI 30	EI 60
	136 (100-45) MW	[1x18 + 100 + 1x18]	35	4.55	5.05	5.40	6.00	2.92	49	51 (-3, -7)	EI 30	Not applicable
M 125-45 XL Pladur® stud	155 (125-45) MW	[1x15 + 125 + 1x15]	29	4.60	5.10	5.50	6.10	3.49	48	50 (-3, -9)	EI 30	EI 60
	161 (125-45) MW	[1x18 + 125 + 1x18]	36	5.15	5.70	6.15	6.80	3.51	49	51 (-3, -7)	EI 30	Not applicable

(1) Fire resistance **EI 30** test remains valid up to a maximum height of **5.0 m** in accordance with EN standard 15254-3.
Fire resistance **EI 60** test remains valid up to a maximum height of **4.0 m** in accordance with EN standard 1364-1.



SINGLE FRAME

PLADUR® MULTI-LAYER PARTITION

SYSTEM DEFINITION

Partition wall consisting of two or more **Pladur®** boards screwed to each side of a galvanised steel frame, built from **Pladur®** studs (vertical elements) and **Pladur®** U-tracks (horizontal elements).

FIELD OF APPLICATION

Interior distribution walls in a single unit of use.

Profile	System	Boards	Mass (kg/m²)	Maximum height (m)				Thermal resistance m²K/W	Acoustic insulation		Fire resistance[1]	
				]		][			R_A (dBA)	R_w (C, C_{tr}) (dB)	N HI I	F O
				600	400	600	400					
M 48-35 Pladur® stud	98 (48-35) MW	[2x12.5 + 48 + 2x12.5]	42	3.05	3.40	3.65	4.00	1.71	52.5	51 (0, -5)	EI 60	EI 120
	108 (48-35) MW	[2x15 + 48 + 2x15]	48	3.05	3.40	3.65	4.00	1.75	51	52 (-2, -7)	EI 90	EI 120
	120 (48-35) MW	[2x18 + 48 + 2x18]	62	3.40	3.80	4.05	4.50	1.79	56	57 (-2, -7)	EI 90	Not applicable
M 48-45 XL Pladur® stud	98 (48-45) MW	[2x12.5 + 48 + 2x12.5]	42	3.20	3.55	3.80	4.25	1.71	52.5	51 (0, -5)	EI 60	EI 120
	108 (48-45) MW	[2x15 + 48 + 2x15]	48	3.20	3.55	3.80	4.25	1.75	51	52 (-2, -7)	EI 90	EI 120
	120 (48-45) MW	[2x18 + 48 + 2x18]	62	3.60	3.95	4.25	4.70	1.79	56	57 (-2, -7)	EI 90	Not applicable
M 62-45 XL Pladur® stud	112 (62-45) MW	[2x12.5 + 62 + 2x12.5]	42	3.70	4.10	4.40	4.90	2.00	52.5	51 (0,-5)	EI 60	EI 120
	122 (62-45) MW	[2x15 + 62 + 2x15]	48	3.70	4.10	4.40	4.90	2.04	51	52 (-2,-7)	EI 90	EI 120
	134 (62-45) MW	[2x18 + 62 + 2x18]	62	4.15	4.60	4.90	5.45	2.08	56	57 (-2;-7)	EI 90	Not applicable

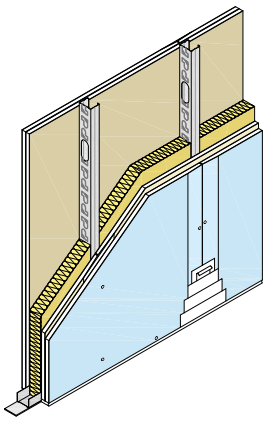
(1) Fire resistance **EI 60** test remains valid up to a maximum height of **5.0 m** in accordance with EN standard 15254-3.
Fire resistance **EI 90** test remains valid up to a maximum height of **5.0 m** in accordance with EN standard 15254-3.
Fire resistance **EI 120** test remains valid up to a maximum height of **4.0 m** in accordance with EN standard 1364-1.

N Pladur® **N** board HI Pladur® **H1** board I Pladur® **I** board F Pladur® **F** board O Pladur® **OMNIA** board

Profile	System	Boards	Mass (kg/m²)	Maximum height (m)				Thermal resistance m²K/W	Acoustic insulation		Fire resistance[1]	
				]		][			R_A (dBA)	R_w (C, C_{tr}) (dB)	N HI I	F O
				600	400	600	400					
M 70-35 Pladur® stud	120 (70-35) MW	[2x12.5 + 70 + 2x12.5]	42	3.85	4.25	4.55	5.05	2.26	53.5	55 (-1, -6)	EI 60	EI 120
	130 (70-35) MW	[2x15 + 70 + 2x15]	48	3.85	4.25	4.55	5.05	2.30	54	54 (-1, -6)	EI 90	EI 120
	142 (70-35) MW	[2x18 + 70 + 2x18]	62	4.30	4.75	5.10	5.65	2.34	55	56 (-2, -4)	EI 90	Not applicable
M 70-45 XL Pladur® stud	120 (70-45) MW	[2x12.5 + 70 + 2x12.5]	42	4.00	4.45	4.80	5.30	2.26	53.5	55 (-1, -6)	EI 60	EI 120
	130 (70-45) MW	[2x15 + 70 + 2x15]	48	4.00	4.45	4.80	5.30	2.30	54	54 (-1, -6)	EI 90	EI 120
	142 (70-45) MW	[2x18 + 70 + 2x18]	62	4.50	4.95	5.35	5.90	2.34	55	56 (-2, -4)	EI 90	Not applicable
M 90-45 XL Pladur® stud	140 (90-45) MW	[2x12.5 + 90 + 2x12.5]	43	4.60	5.05	5.45	6.05	2.81	54	56 (-3, -8)	EI 60	EI 120
	150 (90-45) MW	[2x15 + 90 + 2x15]	49	4.60	5.05	5.45	6.05	2.85	55	56 (-2, -4)	EI 90	EI 120
	162 (90-45) MW	[2x18 + 90 + 2x18]	63	5.10	5.65	6.10	6.75	2.89	56	57 (-2, -4)	EI 90	Not applicable
M 90 Pladur® stud	140 (90) MW	[2x12.5 + 90 + 2x12.5]	43	4.65	5.15	5.55	6.15	2.81	54	56 (-3, -8)	EI 60	EI 120
	150 (90) MW	[2x15 + 90 + 2x15]	49	4.65	5.15	5.55	6.15	2.85	55	56 (-2, -4)	EI 90	EI 120
	162 (90) MW	[2x18 + 90 + 2x18]	63	5.20	5.75	6.20	6.85	2.89	56	57 (-2, -4)	EI 90	Not applicable
M 100-45 XL Pladur® stud	150 (100-45) MW	[2x12.5 + 100 + 2x12.5]	43	4.85	5.40	5.80	6.40	2.98	54	56 (-3, -8)	EI 60	EI 120
	160 (100-45) MW	[2x15 + 100 + 2x15]	49	4.85	5.40	5.80	6.40	3.02	55	56 (-2, -4)	EI 90	EI 120
	172 (100-45) MW	[2x18 + 100 + 2x18]	63	5.45	6.00	6.45	7.15	3.06	56	57 (-2, -4)	EI 90	Not applicable
M 125-45 XL Pladur® stud	175 (125-45) MW	[2x12.5 + 125 + 2x12.5]	44	5.55	6.15	6.60	7.30	3.67	54	56 (-3, -8)	EI 60	EI 120
	185 (125-45) MW	[2x15 + 125 + 2x15]	50	5.55	6.15	6.60	7.30	3.71	55	56 (-2, -4)	EI 90	EI 120
	197 (125-45) MW	[2x18 + 125 + 2x18]	64	6.20	6.85	7.35	8.15	3.75	56	57 (-2, -4)	EI 90	Not applicable

(1) Fire resistance **EI 60** test remains valid up to a maximum height of **5.0 m** in accordance with EN standard 15254-3.
Fire resistance **EI 90** test remains valid up to a maximum height of **5.0 m** in accordance with EN standard 15254-3.
Fire resistance **EI 120** test remains valid up to a maximum height of **4.0 m** in accordance with EN standard 1364-1.

N Pladur® **N** board HI Pladur® **HI** board I Pladur® **I** board F Pladur® **F** board O Pladur® **OMNIA** board



SINGLE FRAME

PLADUR® OMNIA PARTITION WITH LOADS

SYSTEM DEFINITION

Partition wall consisting of two **Pladur®** boards, being the outer or both Pladur® **OMNIA** boards, screwed to each side of a galvanised steel frame, built from **Pladur®** studs (vertical elements) and **Pladur®** U-tracks (horizontal elements).

FIELD OF APPLICATION

Exclusively for use in interiors. Partition walls with diverse requirements: need for high load resistance, zones potentially exposed to impact or high footfall areas and premises with average humidity.

Profile	System	Boards	Surface mass (kg/m²)	Type of loads(1)	Maximum height (m)				Thermal resistance m²K/W	Acoustic insulation	
					]		][			R_A (dBA)	R_w (C, C_{tr}) (dB)
					600	400	600	400			
M 48-35 Pladur® stud	73 (48-35) MW	[1x12.5+48+1x12.5]	33	Light	-	2.80*	-	3.35*	1.61	39.5	40 (-2,-8)
				Medium	-	2.60*	-	3.20*			
				Heavy	-	2.35*	-	3.00*			
	78 (48-35) MW	[1x15+48+1x15]	35	Light	2.60	2.80	3.05	3.35	1.63	43.5	46 (-3,-8)
				Medium	2.30	2.60	2.85	3.20			
				Heavy	1.95	2.35	2.65	3.00			
	98 (48-35) MW	[2x12.5+48+2x12.5]	57	Light	3.05	3.40	3.65	4.00	1.71	52.5	51 (0, -5)
				Medium	2.90	3.25	3.50	3.90			
				Heavy	2.65	3.05	3.35	3.75			
	108 (48-35) MW	[2x15+48+2x15]	66	Light	3.05	3.40	3.65	4.00	1.75	51	52 (-2,-7)
				Medium	2.90	3.25	3.50	3.90			
				Heavy	2.65	3.05	3.35	3.75			
M 48-45 XL Pladur® stud	73 (48-45) MW	[1x12.5+48+1x12.5]	33	Light	-	2.95*	-	3.50*	1.61	39.5	40 (-2,-8)
				Medium	-	2.80*	-	3.35*			
				Heavy	-	2.55*	-	3.20*			
	78 (48-45) MW	[1x15+48+1x15]	35	Light	2.70	2.95	3.20	3.50	1.63	43.5	46 (-3,-8)
				Medium	2.45	2.80	3.00	3.35			
				Heavy	2.15	2.55	2.80	3.20			
	98 (48-45) MW	[2x12.5+48+2x12.5]	57	Light	3.20	3.55	3.80	4.25	1.71	52.5	51 (0, -5)
				Medium	3.05	3.40	3.70	4.10			
				Heavy	2.85	3.25	3.55	3.95			
	108 (48-45) MW	[2x15+48+2x15]	66	Light	3.20	3.55	3.80	4.25	1.75	51	52 (-2,-7)
				Medium	3.05	3.40	3.70	4.10			
				Heavy	2.85	3.25	3.55	3.95			
M 62-45 XL Pladur® stud	87 (62-45) MW	[1x12.5+62+1x12.5]	33	Light	-	3.40*	-	4.05*	1.90	39.5	40 (-2,-8)
				Medium	-	3.25*	-	3.95*			
				Heavy	-	3.10*	-	3.80*			
	92 (62-45) MW	[1x15+62+1x15]	35	Light	3.10	3.40	3.70	4.05	1.92	43.5	46 (-3,-8)
				Medium	2.90	3.25	3.55	3.95			
				Heavy	2.70	3.10	3.35	3.80			
	112 (62-45) MW	[2x12.5+62+2x12.5]	57	Light	3.70	4.10	4.40	4.90	2.00	52.5	51 (0, -5)
				Medium	3.55	3.95	4.30	4.75			
				Heavy	3.40	3.85	4.15	4.65			
	122 (62-45) MW	[2x15+62+2x15]	66	Light	3.70	4.10	4.40	4.90	2.04	51	52 (-2,-7)
				Medium	3.55	3.95	4.30	4.75			
				Heavy	3.40	3.85	4.15	4.65			

*Only refurbishment.
(1) Light loads without eccentricity: up to 75 kg/m², according to UNE standard 102043.
Medium loads without eccentricity: up to 112.5 kg/m², according to report E-113801-001.
Heavy loads without eccentricity: up to 150 kg/m², according to report E-113801-001.

To justify the calculation and type of loads, consult our Omnia documentation.

Profile	System	Boards	Surface mass (kg/m²)	Type of loads[1]	Maximum height (m)				Thermal resistance m²K/W	Acoustic insulation	
					]		][			R_A (dBA)	R_w (C, C_{tr}) (dB)
					600	400	600	400			
M 70-35 Pladur® stud	95 (70-35) MW	[1x12.5+70+1x12.5]	33	Light	-	3.55*	-	4.20*	2.16	42	44 (-3,-11)
				Medium	-	3.40*	-	4.10*			
				Heavy	-	3.25*	-	3.95*			
	100 (70-35) MW	[1x15+70+1x15]	35	Light	3.20	3.55	3.80	4.20	2.18	46,9	48 (-1,-5)
				Medium	3.05	3.40	3.65	4.10			
				Heavy	2.85	3.25	3.50	3.95			
	120 (70-35) MW	[2x12.5+70+2x12.5]	57	Light	3.85	4.25	4.55	5.05	2.26	53,5	55 (-1, -6)
				Medium	3.70	4.15	4.45	4.95			
				Heavy	3.55	4.00	4.35	4.85			
	130 (70-35) MW	[2x15+70+2x15]	66	Light	3.85	4.25	4.55	5.05	2.30	54	54 (-1,6)
				Medium	3.70	4.15	4.45	4.95			
				Heavy	3.55	4.00	4.35	4.85			
M 70-45 XL Pladur® stud	95 (70-45) MW	[1x12.5+70+1x12.5]	33	Light	-	3.70*	-	4.40*	2.16	42	44 (-3,-11)
				Medium	-	3.55*	-	4.30*			
				Heavy	-	3.40*	-	4.15*			
	100 (70-45) MW	[1x15+70+1x15]	35	Light	3.35	3.70	4.00	4.40	2.18	46,9	48 (-1,-5)
				Medium	3.20	3.55	3.85	4.30			
				Heavy	3.00	3.40	3.70	4.15			
	120 (70-45) MW	[2x12.5+70+2x12.5]	57	Light	4.00	4.45	4.80	5.30	2.26	53,5	55 (-1, -6)
				Medium	3.90	4.30	4.70	5.20			
				Heavy	3.75	4.20	4.55	5.10			
	130 (70-45) MW	[2x15+70+2x15]	66	Light	4.00	4.45	4.80	5.30	2.30	54	54 (-1,6)
				Medium	3.90	4.30	4.70	5.20			
				Heavy	3.75	4.20	4.55	5.10			
M 90-45 XL Pladur® stud	115 (90-45) MW	[1x12.5+90+1x12.5]	35	Light	-	4.25*	-	5.05*	2.71	42	44 (-3,-11)
				Medium	-	4.10*	-	4.90*			
				Heavy	-	3.95*	-	4.80*			
	120 (90-45) MW	[1x15+90+1x15]	37	Light	3.80	4.25	4.55	5.05	2.73	48	50 (-3,-9)
				Medium	3.70	4.10	4.45	4.90			
				Heavy	3.55	3.95	4.30	4.80			
	140 (90-45) MW	[2x12.5+90+2x12.5]	58	Light	4.60	5.05	5.45	6.05	2.81	54	56 (-3, -8)
				Medium	4.45	4.95	5.35	5.95			
				Heavy	4.35	4.85	5.25	5.85			
	150 (90-45) MW	[2x15+90+2x15]	67	Light	4.60	5.05	5.45	6.05	2.85	55	56 (-2,-4)
				Medium	4.45	4.95	5.35	5.95			
				Heavy	4.35	4.85	5.25	5.85			
M 100-45 XL Pladur® stud	125 (100-45) MW	[1x12.5+100+1x12.5]	35	Light	-	4.50*	-	5.35*	2.88	42	44 (-3,-11)
				Medium	-	4.40*	-	5.25*			
				Heavy	-	4.25*	-	5.15*			
	130 (100-45) MW	[1x15+100+1x15]	37	Light	4.05	4.50	4.85	5.35	2.90	48	50 (-3,-9)
				Medium	3.95	4.40	4.70	5.25			
				Heavy	3.80	4.25	4.60	5.15			
	150 (100-45) MW	[2x12.5+100+2x12.5]	58	Light	4.85	5.40	5.80	6.40	2.98	54	56 (-3, -8)
				Medium	4.75	5.30	5.70	6.30			
				Heavy	4.65	5.20	5.60	6.25			
	160 (100-45) MW	[2x15+100+2x15]	67	Light	4.85	5.40	5.80	6.40	3.02	55	56 (-2,-4)
				Medium	4.75	5.30	5.70	6.30			
				Heavy	4.65	5.20	5.60	6.25			

*Only refurbishment.
(1) Light loads without eccentricity: up to 75 kg/m², according to UNE standard 102043.
Medium loads without eccentricity: up to 112.5 kg/m², according to report E-113801-001.
Heavy loads without eccentricity: up to 150 kg/m², according to report E-113801-001.

To justify the calculation and type of loads, consult our Omnia documentation.

Profile	System	Boards	Surface mass (kg/m²)	Type of loads[1]	Maximum height (m)				Thermal resistance m²K/W	Acoustic insulation	
					]		][			R_A (dBA)	R_W (C, C_{tr}) (dB)
					600	400	600	400			
M 125-45 XL Pladur® stud	150 (125-45) MW	[1x12.5+125+1x12.5]	36	Light	-	5.10*	-	6.10*	3.47	42	44 (-3,-11)
				Medium	-	5.00*	-	6.00*			
				Heavy	-	4.90*	-	5.90*			
	155 (125-45) MW	[1x15+125+1x15]	38	Light	4.60	5.10	5.50	6.10	3.49	48	50 (-3,-9)
				Medium	4.50	5.00	5.40	6.00			
				Heavy	4.40	4.90	5.30	5.90			
	175 (125-45) MW	[2x12.5+125+2x12.5]	59	Light	5.55	6.15	6.60	7.30	3.67	54	56 (-3, -8)
				Medium	5.45	6.05	6.50	7.20			
				Heavy	5.35	5.95	6.45	7.15			
	185 (125-45) MW	[2x15+125+2x15]	68	Light	5.55	6.15	6.60	7.30	3.71	55	56 (-2,-4)
				Medium	5.45	6.05	6.50	7.20			
				Heavy	5.35	5.95	6.45	7.15			

*Only refurbishment.
(1) Light loads without eccentricity: up to 75 kg/m², according to UNE standard 102043.
Medium loads without eccentricity: up to 112.5 kg/m², according to report E-113801-001.
Heavy loads without eccentricity: up to 150 kg/m², according to report E-113801-001.

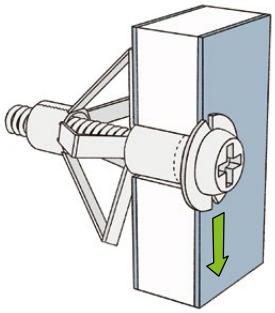
To justify the calculation and type of loads, consult our Omnia documentation.

OMNIA
Pladur® Board

CERTIFIED LOAD CAPACITY

Unlimited applications thanks to its ability to support additional loads. The Pladur® **OMNIA** board allows for more secure and firm fixings, making it ideal for shelves, hanging furniture, or other relatively heavy items. The perfect solution to combine functionality and strength in any type of installation.

SHEAR LOADS

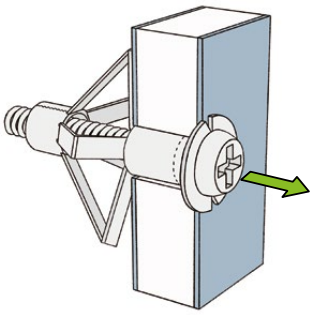


These are loads of objects that do not stick out excessively and therefore only exert a generally vertical and downward force. These loads are those applied to objects that we hang and that barely poke out from the plane, such as a painting.

The following table shows the maximum shear loads for different configurations of Pladur® **OMNIA** claddings.

Wall Composition	Máximum load per point (kg)
1 Pladur® **OMNIA 13/15** board	50
1 Pladur® **N 13/15** board + 1 Pladur® **OMNIA 13/15** board	50
2 Pladur® **OMNIA 13/15** boards	80

PULL-OFF LOADS



These are loads perpendicular to the surface of the facing and applied from the inside to the outside. Such as those exerted by a wall plug used to anchor a piece of furniture to prevent it from tipping over.

The following table shows the maximum pull-off loads for different configurations of Pladur® **OMNIA** claddings.

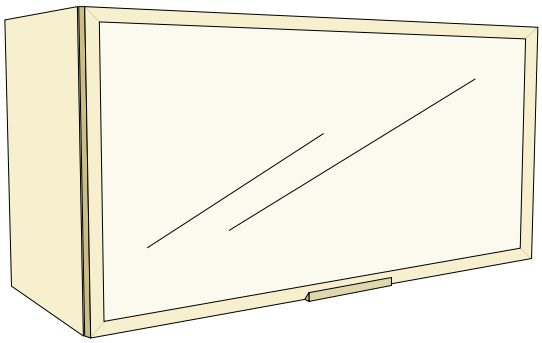
Wall Composition	Máximum load per point (kg)
1 Pladur® **OMNIA 13/15** board	25
1 Pladur® **N 13/15** board + 1 Pladur® **OMNIA 13/15** board	25
2 Pladur® **OMNIA 13/15** boards	33

The minimum separation between each anchoring point must be equal to or greater than 40 cm according to UNE Standard 102043:2013.

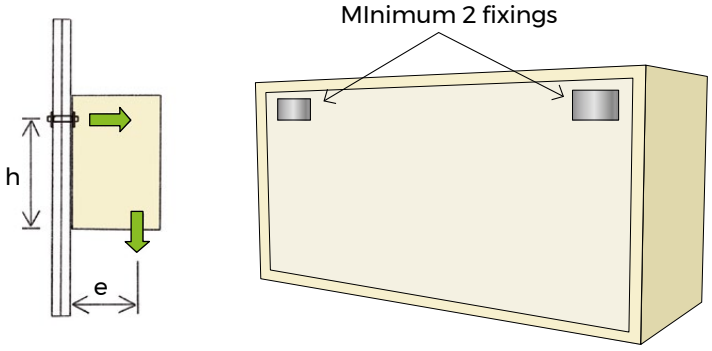
Data obtained by applying a safety coefficient, in accordance with test report 113801. The tests were carried out using metal anchors for hollow materials of the 'umbrella' type with a diameter of 12 mm and M6 metric screws.

The anchors used must be specifically designed for hollow materials, with a length appropriate to the thickness of the wall, and must guarantee a maximum admissible load equal to or greater than that indicated in the tables. The anchor manufacturer must certify this load per point on the plasterboard support.

CONTINIOUS ECCENTRIC LOADS



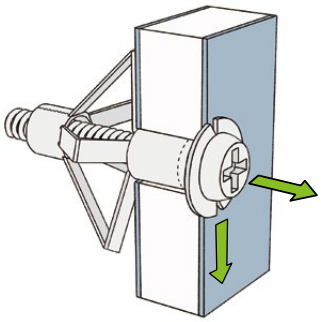
These are loads that **jut out considerably from the wall** and therefore their centre of gravity has been substantially displaced from the anchoring plane (**e**), exerting a lever force. This can be the load of a suspended kitchen cabinet.



To achieve maximum resistance and good performance of the anchors, we must properly distribute the loads, for which it is recommended that:

- **the number of fixings** per element must be **at least 2**.
- **the minimum distance** between fixings must be equal to or greater than **40 cm horizontally** (according to UNE standard 102043).
- **the height (h)**, from the fixing point to the lower support point of the eccentric load, **be as large as possible and in no case less than 15 cm**, thus minimising the lever effect.

COMBINED LOADS (SHEAR + PULL-OFF)

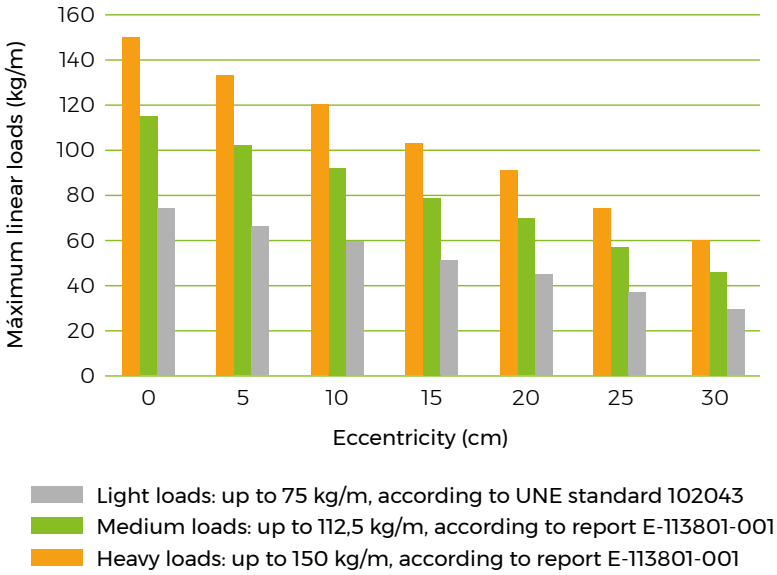


Eccentric loads cause both shear and pull-off loads.

Based on the results of tests recorded in report E-113801-001, claddings with Pladur® **OMNIA** board **support shear, pull-off, and combined loads higher* than those derived from the UNE standard 102043.**

** According to the conditions established in the technical study E-113801-001, including the reduction of the maximum height of the partition or lining.*

CONTINIUS LIGHT, MEDIUM AND HEAVY LOADS



Plaster board partitions walls and wall lingings admit continuous light loads, up to 75 kg/m, according to UNE standard 102043.

Pladur® **OMNIA** partitions and wall linings allow the use of **higher loads, medium and heavy loads,** in addition to light loads according to Tecnalia technical study E-113801-001.

Depending on the type of load (light, medium or heavy), the most suitable system must be selected (Pladur® **OMNIA** partitions or wall linings) and, based on this, the maximum height must be determined (see tables on pages 20 and 28).

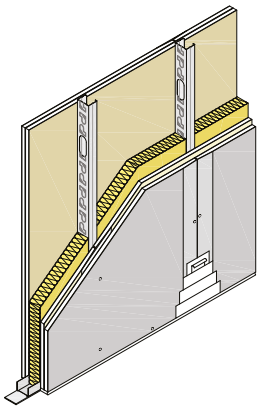
The following tables indicate the pull-off loads per point for each load type, based on the anchor points per linear meter and the height (h), measured from the anchoring point to the lower support point of the load.

Anchor points /m	Light loads							Medium loads							Heavy loads						
	Height (h)							Height (h)							Height (h)						
	15	20	25	30	40	50	60	15	20	25	30	40	50	60	15	20	25	30	40	50	60
0.75					32	26	22							32							
1				32	24	19	16						29	24							32
1.5		32	26	22	16	13	11				32	24	19	16					32	26	22
2	32	24	19	16	12	9,5	7,9			29	24	18	15	12				32	24	19	16
3	22	16	13	11	7.9	6.3	5.3	32	24	19	16	12	9,5	7.9		32	26	22	16	13	11

2 Pladur® **OMNIA 13/15** boards

2 Pladur® (**OMNIA 13/15** + **N 13/15**) boards or 1 Pladur® **OMNIA 13** board

Limitation of liability:
*The maximum loads indicated in this document refer exclusively to those supported by Pladur® **OMNIA** Systems. Compliance with the maximum loads indicated in this document is conditional on the correct choice of anchoring elements and the correct execution of the work. The limitations defined in the technical specifications of the anchoring elements and the installation recommendations defined by the manufacturers of these anchoring elements must be faithfully followed. Likewise, the maximum load limitations of the elements to be anchored and the recommendations for installation and use defined by the manufacturers of the anchoring elements to be anchored must be faithfully followed. In addition to the above, any permanent and/or occasional overloads that may occur during the use of the elements to be anchored must be taken into account in the calculations; for this purpose, it is recommended to previously evaluate the potential overloads that may occur during use.*



SINGLE FRAME

PLADUR® SOLIDTEX STUD WALL LINING WITH LOADS

SYSTEM DEFINITION

Partition wall consisting of two **Pladur®** boards, being the outer or both Pladur® **SOLIDTEX** boards, screwed to each side of a galvanised steel frame, built from **Pladur®** studs (vertical elements) and **Pladur®** U-tracks (horizontal elements).

FIELD OF APPLICATION

Exclusively for use in interiors. Partition walls with diverse requirements: need for high load resistance, zones potentially exposed to impact or high footfall areas and premises with average humidity.

Profile	System	Boards	Surface mass (kg/m²)	Type of loads	Maximum height (m)				Thermal resistance m²K/W	Acoustic insulation	
					]		][				
					600	400	600	400		R_A (dBA)	R_W (C, C_{tr}) (dB)
M 48-35 Pladur® stud	98 (48-35) MW	[2x12.5 + 48 + 2x12.5]	67	Light	3.05	3.40	3.65	4.00	1.71	52.5	51 (0, -5)
				Medium	2.90	3.25	3.50	3.90			
				Heavy	2.65	3.05	3.35	3.75			
M 48-45 XL Pladur® stud	98 (48-45) MW	[2x12.5 + 48 + 2x12.5]	67	Light	3.20	3.55	3.80	4.25	1.71	52.5	51 (0, -5)
				Medium	3.05	3.40	3.70	4.10			
				Heavy	2.85	3.25	3.55	3.95			
M 62-45 XL Pladur® stud	112 (62-45) MW	[2x12.5 + 62 + 2x12.5]	67	Light	3.70	4.10	4.40	4.90	1.87	52.5	51 (0, -5)
				Medium	3.55	3.95	4.30	4.75			
				Heavy	3.40	3.85	4.15	4.65			
M 70-35 Pladur® stud	120 (70-35) MW	[2x12.5 + 70 + 2x12.5]	67	Light	3.85	4.25	4.55	5.05	2.26	53.5	55 (-1, -6)
				Medium	3.70	4.15	4.45	4.95			
				Heavy	3.55	4.00	4.35	4.85			
M 70-45 XL Pladur® stud	120 (70-45) MW	[2x12.5 + 70 + 2x12.5]	67	Light	4.00	4.45	4.80	5.30	2.26	53.5	55 (-1, -6)
				Medium	3.90	4.30	4.70	5.20			
				Heavy	3.75	4.20	4.55	5.10			
M 90-45 XL Pladur® stud	140 (90-45) MW	[2x12.5 + 90 + 2x12.5]	68	Light	4.60	5.05	5.45	6.05	2.81	54	56 (-3, -8)
				Medium	4.45	4.95	5.35	5.95			
				Heavy	4.35	4.85	5.25	5.85			
M 100-45 XL Pladur® stud	150 (100-45) MW	[2x12.5 + 100 + 2x12.5]	68	Light	4.85	5.40	5.80	6.40	2.98	54	56 (-3, -8)
				Medium	4.75	5.30	5.70	6.30			
				Heavy	4.65	5.20	5.60	6.25			
M 125-45 XL Pladur® stud	175 (125-45) MW	[2x12.5 + 125 + 2x12.5]	69	Light	5.55	6.15	6.60	7.30	3.67	54	56 (-3, -8)
				Medium	5.45	6.05	6.50	7.20			
				Heavy	5.35	5.95	6.45	7.15			

* Only refurbishment

(1) Light loads without eccentricity: up to 75 kg/m², according to UNE standard 102043.
Medium loads without eccentricity: up to 112.5 kg/m², according to report E-088220-001.
Heavy loads without eccentricity: up to 150 kg/m², according to report E-088220-001.

To justify the calculation and type of loads, consult our Solidtex documentation.

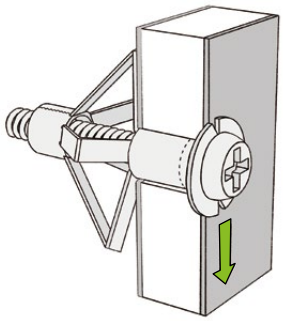
SOLIDTEX
Pladur® Board

with HDC HIGH DENSITY CRYSTALLISATION TECHNOLOGY

ROBUST | HIGH LOAD CAPACITY | WATER RESISTANT

The board that stands up to everything

SHEAR LOADS

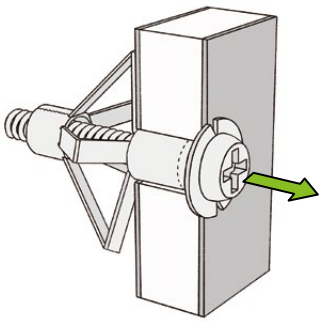


These are the loads of objects that do not protrude excessively and therefore only exert a generally vertical downward force. These loads are applied by objects that we hang and that barely extend from the surface, such as a picture frame.

The following table shows the maximum shear loads for different configurations of Pladur® **SOLIDTEX** claddings.

Wall composition	Maximum load per point (kg)
1 Pladur® **SOLIDTEX 13** board	64
1 Pladur® **N 13** board + 1 Pladur® **SOLIDTEX 13** board	64
2 Pladur® **SOLIDTEX 13** boards	95

PULL-OFF LOADS



They are loads perpendicular to the surface of the wall and applied from the inside out. Like those exerted by a wall plug in a wall used to anchor a piece of furniture and prevent it from tipping over.

The following table shows the maximum pull-off loads for different configurations of Pladur® **SOLIDTEX** claddings.

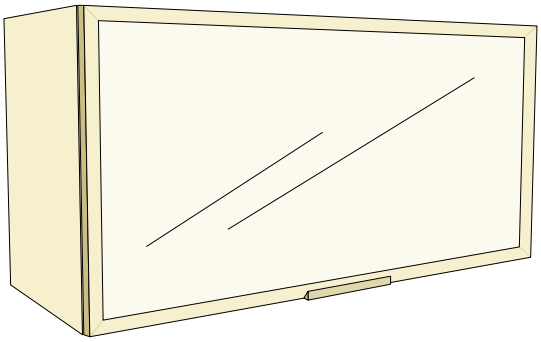
Wall composition	Maximum load per point (kg)
1 Pladur® **SOLIDTEX 13** board	30
1 Pladur® **N 13** board + 1 Pladur® **SOLIDTEX 13** board	30
2 Pladur® **SOLIDTEX 13** boards	40

The minimum separation between each fixing point must be equal to or greater than 40 cm pursuant to UNE standard 102043:2013.

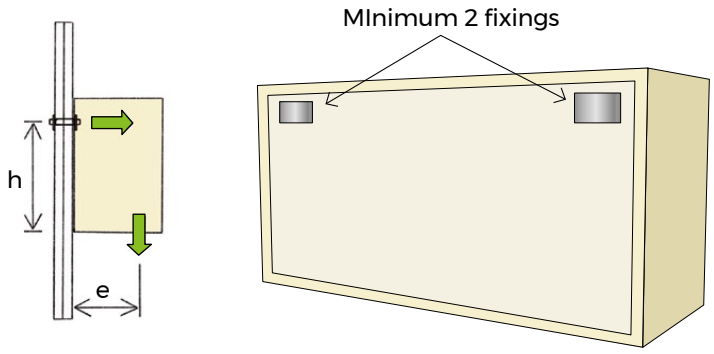
Data obtained by applying a safety coefficient, in accordance with test report E-088220-001. The tests were carried out using metal anchors for hollow materials of the 'umbrella' type with a diameter of 12 mm and M6 metric screws.

The anchors used must be specifically designed for hollow materials, with a length appropriate to the thickness of the wall, and must ensure a maximum admissible load equal to or greater than that indicated in the tables. The anchors manufacturer must certify this load per point on the plasterboard support.

CONTINIOUS ECCENTRIC LOADS



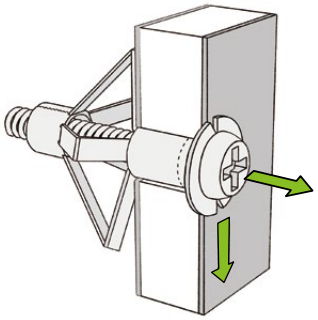
These are loads that **jut out considerably from the wall** and therefore their centre of gravity has been substantially displaced from the anchoring plane (**e**), exerting a lever force. This can be the load of a suspended kitchen cabinet.



To achieve maximum resistance and good performance of the anchors, we must properly distribute the loads, for which it is recommended that:

- **the number of fixings** per element must be **at least 2**.
- **the minimum distance** between fixings must be equal to or greater than **40 cm horizontally** (according to UNE standard 102043).
- **the height (h)**, from the fixing point to the lower support point of the eccentric load, **be as large as possible and in no case less than 15 cm**, thus minimising the lever effect.

COMBINED LOADS (SHEAR + PULL-OFF)

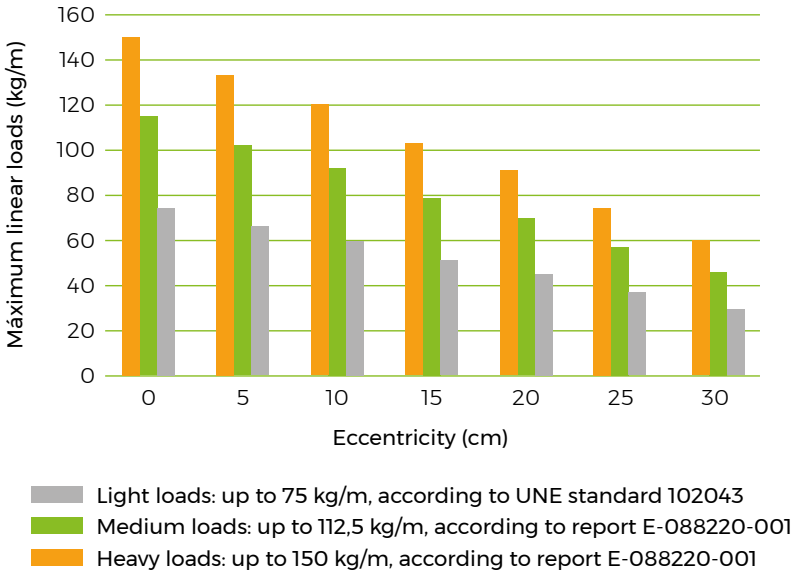


Eccentric loads cause both shear and pull-off loads.

Based on the results of tests recorded in report E-088220-001, claddings with Pladur® **SOLIDTEX** board **support shear, pull-off, and combined loads higher* than those derived from the UNE standard 102043.**

** According to the conditions established in the technical study E-088220-001, including the reduction of the maximum height of the partition or lining.*

CONTINIUS LIGHT, MEDIUM AND HEAVY LOADS



Plaster board partitions walls and wall lingings withstand continuous light loads, up to 75 kg/m, according to UNE standard 102043.

Pladur® **SOLIDTEX** partitions and wall linings allow the use of **higher loads, medium and heavy loads,** in addition to light loads, according to the Tecnalia technical study E-088220-001.

Depending on the type of load (light, medium, or heavy), the most suitable system must be selected (Pladur® **SOLIDTEX** partitions or linings), and based on this, its maximum height must be determined (see tables on pages 22 and 34).

The following tables indicate the pull-off loads per point for each load type, based on the anchor points per linear meter and the height (h), measured from the fixation point to the lower support point of the load.

Fixing points/m	Light loads							Medium loads							Heavy loads						
	Height of the support element							Height of the support element							Height of the support element						
	15	20	25	30	40	50	60	15	20	25	30	40	50	60	15	20	25	30	40	50	60
0.8					32	25	21						38	31.7							
1			38	32	24	19	16					35.6	28.5	23.8						38	31.7
1.5		32	25	21	16	13	11			38	31.7	23.8	19	15.8					31.7	25.3	21.1
2	32	24	19	16	12	9.5	7.9		35.6	28.5	23.8	17.8	14.3	11.9			38	31.7	23.8	19	15.8
2.5	25	19	15	13	9.5	7.6	6.3	38	28.5	22.8	19	14.3	11.4	9.5		38	30.4	25.3	19	15.2	12.7

2 Pladur® **SOLIDTEX 13** boards

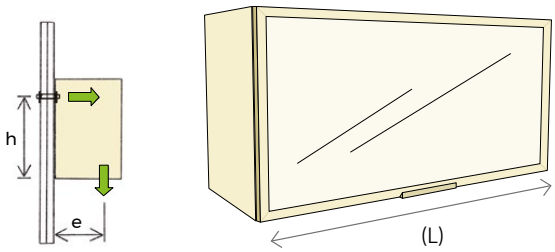
2 Pladur® **SOLIDTEX 13** + **N 13** boards or 1 Pladur® **SOLIDTEX 13** board

Limitation of liability:
*The maximum loads indicated in this document refer exclusively to those supported by Pladur® **SOLIDTEX** systems. Compliance with the maximum loads indicated in this document depends on good choice of fixing elements and good work execution. The limitations defined in the technical specifications for the fixing elements and the installation recommendations defined by the fixing element manufacturers must be followed exactly. Furthermore, the maximum load limitations for fixed element and the installation and use recommendations defined by the fixed element manufacturers should also be followed exactly. In addition to the above, the calculations for any permanent and/or occasional excess load that may arise in the use of the fixed elements should also be taken into account. It is therefore recommendable to conduct a prior assessment of potential excess loads that may occur during use.*

CALCULATE IT LIKE THIS

You wish to install a kitchen cupboard on a Pladur® **98/600** partition with a 1 Pladur® **N** board + 1 Pladur® **SOLIDTEX** board for each side.

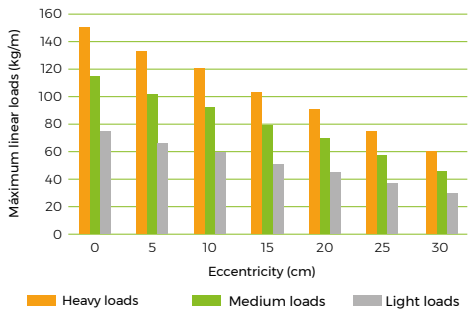
How high a load doa you want?



Cupboard details:
Length (L): 120 cm (1.2 metres)
Height: 35 cm (32 cm lower support screw)
Depth: 30 cm
Two fixing points 100 cm (1m) apart. Cupboard empty weight 25 kg
Load permitted by the cupboard manufacturer 35 kg

Checks
Minimal distance between fixing points: 100 cm > 40 cm ✓
Height of the supported edge of the cupboard: 32 cm > 15 cm ✓

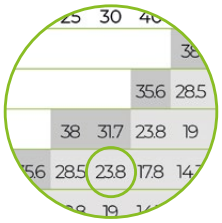
Is it a light, medium or heavy load?



Total load requested: 25+35 = 60 kg
Linear load = 60 kg/1 m (distance between hangers) = 60 kg/m
Eccentricity:
- If the total weight (cupboard + load) is centred, the centre of gravity is e = 0.15 m
- Considering that the weight might be near the door, the centre of gravity is at 'e' greater than 0.15 m =>
  Take e = 0.20 m

Checks
Point shear load:
60 kg/2 points = 30 kg/point < 64 kg (Maximum loads for 1 Pladur® **N** board + 1 Pladur® **SOLIDTEX** board) ✓
For eccentricity, 20 cm and 60 kg/ml is a MEDIUM load ✓

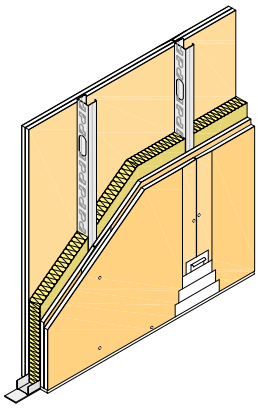
What is the point tear-off load?



Height of the support element (h) = 32 cm as lower support screw
As 32 >30, take 30 cm
No. of fixing points per metre = 2
Pull-off load 23.8 kg/point

Will the wall plugs bear this load?

Finally, you need to check the strength of the chosen wall plugs. The wall plugs must meet the combined load requirement, as the combined effect of the calculated pull-off load (23.8 kg per point in this example) and the calculated shear load (30 kg per point in this example).



SINGLE FRAME

PLADUR® WAB PARTITION

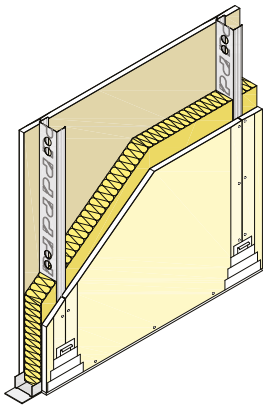
SYSTEM DEFINITION

Partition wall consisting of two Pladur® **WAB** boards screwed to each side of a Z5 galvanized steel frame, built from Pladur® **XL** studs (vertical elements) and Pladur® **XL** U-tracks (horizontal elements).

FIELD OF APPLICATION

Interior partition walls in a single unit of use, exposed to high humidity.

Profile	System	Boards	Surface mass (kg/m²)	Maximum height (m)*				Thermal resistance m²K/W	Acoustic insulation	
				]		][				
				600	400	600	400		R_A (dBA)	R_w (C, C_{tr}) (dB)
M 48-45 XL Z5 Pladur® stud	98 (48-45) MW	[2x12.5+48+2x12.5]	51	3.20	3.55	3.80	4.25	1.71	52.5	51 (0,-5)
M 70-45 XL Z5 Pladur® stud	120 (70-45) MW	[2x12.5+70+2x12.5]	51	4.00	4.45	4.80	5.30	2.26	53.5	55 (-1,-6)



SINGLE FRAME

PLADUR® MAGNA PARTITION

SYSTEM DEFINITION

Partition wall consisting of one or two Pladur® **MAGNA** boards screwed to each side of a galvanised steel frame, built from **Pladur®** studs spaced at 900 mm or 450 mm intervals (vertical elements) and **Pladur®** U-tracks (horizontal elements).

FIELD OF APPLICATION

Interior partition walls in a single use unit with excellent fire resistance and mechanical resistance.

Profile	System	Boards	Surface mass (kg/m²)	Maximum height (m)*				Thermal resistance m²K/W	Acoustic insulation		Fire resistance[1]
				]		][			R_A (dBA)	$R_W(C,C_{tr})$ (dB)	Ⓜ Ⓜ
				900	450	900	450				
M 48-35 Pladur® stud	84 (48-35) MW	[1x18 + 48 + 1x18]	36	-	3.80	-	4.75	1.65	43.9	46 (-3, -9)	S/E
	98 (48-35) MW	[1x25 + 48 + 1x25]	45	-	4.20	-	5.10 (4.55)	1.71	45.2	47 (-3, -4)	EI 120
	120 (48-35) MW	[2x18 + 48 + 2x18]	69	-	3.80	-	4.75 (4.50)	1.80	45.6	53 (-9, -17)	EI 180
M 48-45 XL Pladur® stud	84 (48-45) MW	[1x18 + 48 + 1x18]	36	3.00	3.85	3.85	4.80 (4.00)	1.65	43.9	46 (-3, -9)	EI 90
	98 (48-45) MW	[1x25 + 48 + 1x25]	45	3.40	4.25	4.25	5.15	1.71	45.2	47 (-3, -4)	EI 120
	120 (48-45) MW	[2x18 + 48 + 2x18]	69	-	3.85	-	4.80 (4.50)	1.80	45.6	53 (-9, -17)	EI 180
M 62-45 XL Pladur® stud	98 (62-45) MW	[1x18 + 62 + 1x18]	37	3.55	4.55 (4.00)	4.55 (4.00)	5.70 (4.00)	2.07	43.9	46 (-3, -9)	EI 90
	112 (62-45) MW	[1x25 + 62 + 1x25]	46	3.85	4.80 (4.40)	4.80 (4.40)	5.85 (5.20)	2.13	45.2	47 (-3, -4)	EI 120
	134 (62-45) MW	[2x18 + 62 + 2x18]	70	-	4.55 (4.50)	-	5.70 (4.50)	2.21	45.6	53 (-9, -17)	EI 180
M 70-35 Pladur® stud	106 (70-35) MW	[1x18 + 70 + 1x18]	37	-	4.90	-	6.20	2.21	43.9	46 (-3, -9)	S/E
	120 (70-35) MW	[1x25 + 70 + 1x25]	46	-	5.15 (5.00)	-	6.25 (5.85)	2.27	45.2	47 (-3, -4)	EI 120
	142 (70-35) MW	[2x18 + 70 + 2x18]	70	-	4.90 (4.50)	-	6.20 (4.50)	2.35	45.6	53 (-9, -17)	EI 180
M 70-45 XL Pladur® stud	106 (70-45) MW	[1x18 + 70 + 1x18]	37	3.90	5.00 (4.00)	5.00 (4.00)	6.30 (4.00)	2.21	43.9	46 (-3, -9)	EI 90
	120 (70-45) MW	[1x25 + 70 + 1x25]	46	4.20	5.20 (5.00)	5.20 (5.00)	6.35 (5.85)	2.27	45.2	47 (-3, -4)	EI 120
	142 (70-45) MW	[2x18 + 70 + 2x18]	70	-	5.00 (4.50)	-	6.30 (4.50)	2.35	45.6	53 (-9, -17)	EI 180
M 90-45 XL Pladur® stud	126 (90-45) MW	[1x18 + 90 + 1x18]	38	4.55 (4.00)	5.85 (4.00)	5.85 (4.00)	7.00[1] (4.00)	2.90	45.9	48 (-3, -7)	EI 90
	140 (90-45) MW	[1x25 + 90 + 1x25]	47	4.75 (4.40)	5.90 (5.15)	5.90 (5.15)	7.00[1] (6.25)	2.96	48.4	50 (-3, -5)	EI 120
	162 (90-45) MW	[2x18 + 90 + 2x18]	71	-	5.85 (4.50)	-	7.00[1] (4.50)	3.05	56.3	58 (-3, -9)	EI 180
M 100-45 XL Pladur® stud	136 (100-45) MW	[1x18 + 100 + 1x18]	38	4.90 (4.00)	6.35 (4.00)	6.35 (4.00)	7.00[1] (4.00)	3.18	49	51 (-3, -7)	EI 90
	150 (100-45) MW	[1x25 + 100 + 1x25]	47	5.05 (4.75)	6.30 (5.90)	6.30 (5.90)	7.00[1]	3.24	49	51 (-3, -7)	EI 120
	172 (100-45) MW	[2x18 + 100 + 2x18]	71	-	6.35 (4.50)	-	7.00[1] (4.50)	3.33	56.3	58 (-3, -9)	EI 180
M 125-45 XL Pladur® stud	161 (125-45) MW	[1x18 + 125 + 1x18]	39	5.80 (4.00)	7.00[1] (4.00)	7.00[1] (4.00)	7.00[1] (4.00)	3.74	49	51 (-3, -7)	EI 90
	175 (125-45) MW	[1x25 + 125 + 1x25]	48	5.80 (5.05)	7.00[1] (6.25)	7.00[1] (6.25)	7.00[1]	3.79	49	51 (-3, -7)	EI 120
	197 (125-45) MW	[2x18 + 125 + 2x18]	72	-	7.00[1] (4.50)	-	7.00[1] (4.50)	3.88	56.3	58 (-3, -9)	EI 180

* The values in parentheses limit the maximum height as required by the fire resistance certificate.

TECHNICAL NOTES AND CONSIDERATIONS

MECHANICAL RESISTANCE:
(1) The system has not been assessed for heights over 7 m.

For other partition walls not considered in this document, please, contact **Pladur® Technical Support** for technical specifications.

The surface mass indicated in the tables is based on systems with Pladur® **N**, Pladur® **SOLIDTEX**, Pladur® **OMNIA**, Pladur® **WAB** or Pladur® **MAGNA** boards, depending on the corresponding system.

ACOUSTIC INSULATION:
The acoustic insulation values for systems with 18 mm boards are based on systems with 19 mm boards.

FIRE RESISTANCE:
Please, pay attention to test certificate execution condition.

S/E: Classification untested.

Not applicable There is no Pladur® 18-mm **F** board.

Wall lining and partition wall systems with Pladur® **H1** and **I** boards can assume the same fire resistance classification as the Pladur® **N** board performance test. The results may be extrapolated if indicated in the building code norm and in accordance with the extension reports.

Wall lining, partition wall and ceiling systems with Pladur® **OMNIA** boards can assume the same fire resistance classification as the Pladur® **F** board performance test. The results may be extrapolated if indicated in the building code norm and in accordance with the extension report.

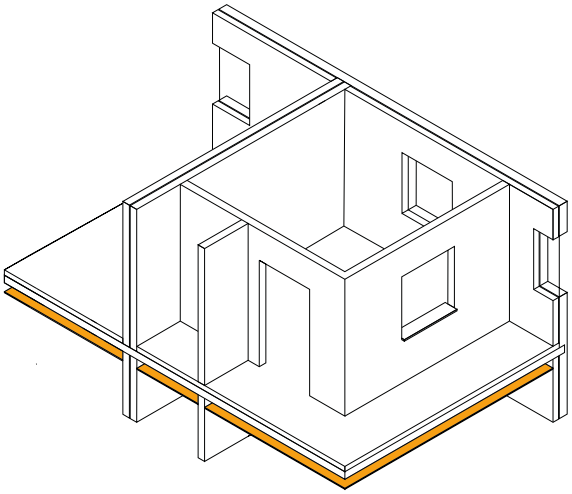
Wall lining and partition wall systems with Pladur® **F** and **OMNIA** boards can assume the same fire resistance classification as the Pladur® **N** board performance test. The results may be extrapolated if indicated in the building code norm and in accordance with the extension report.

The wall lining, partition wall and ceiling systems with Pladur® **MAGNA H1** boards can assume the same fire resistance classification as the Pladur® **MAGNA** boards performance test. The results may be extrapolated if indicated in the building code norm and in accordance with the extension report.

THERMAL INSULATION:
MW: Mineral wool (both glass wool and rock wool) with a U-value of λ = 0,036 W/mK and variable thickness, required to fill the profile core.

Ⓜ Pladur® **MAGNA** board Ⓜ Pladur® **MAGNA H1** board

INTERIOR CEILINGS



INTERIOR CEILINGS

Pladur® interior ceilings are lining under slabs or horizontal elements comprised of **Pladur**® metal profiles and different types of boards. These are used to:

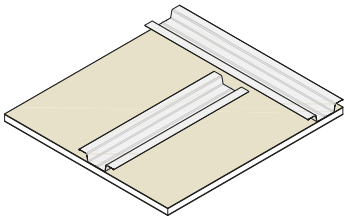
- Conceal installations and/or decorate spaces.
- Provide fire resistance up to EI-120.
- Improve acoustic insulation
- Acoustic conditioning premises to reduce reverberation time and make it easier to understand speech (PLADUR® **FON+**)

ACOUSTIC CONDITIONING AND INSULATION

PERFECT FINISH

FIRE RESISTANCE

EASY TO INSTALL



FURRING CHANNELS

PLADUR® FURRING CHANNELS CEILING

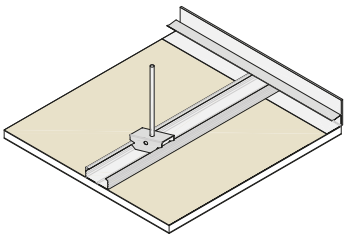
SYSTEM DEFINITION

Furring channel ceiling consisting of a frame made of galvanised steal plate profiles on a base of **Pladur**® furring channels anchored directly to the load bearing structure, which has one or more **Pladur**® boards screwed to its external side.

FIELD OF APPLICATION

Furring channel ceilings anchored to the base support and boards screwed to the furring channels. For building or refurbishment work that does not require a plenum to provide space for installations.

Profile	System	Surface mass (kg/m²)	Distance between attachment (m)			Acoustic insulation				
			Frame distance (mm)			Slab surface mass (kg/m²)	Airborne noise (dBA)		Impact noise (dB)	
			400	500	600		Increase ceiling ΔR_A	Slab + Ceiling R_A	Noise reduction by ceiling ΔL_W	Noise reduction slab + Ceiling $L_{n,w}$
Furring channel Pladur® **82 X 16**	Furring channel 82 x 16 / 1 x 12.5	11	1.1	1.0	-	350 500	-1 -2	52 56	1 1	77 77
	Furring channel 82 x 16 / 1 x 15	13	0.9	0.8	0.8	350 500	-1 -4	52 54	2 2	76 76
	Furring channel 82 x 16 / 2 x 12.5	21	0.5	0.5	0.5	350 500	-1 -2	54 56	4 4	74 74
	Furring channel 82 x 16 / 2 x 15	25	0.4	0.4	0.4	350 500	1 0	54 58	4 4	74 74
Furring channel Pladur® **70 X 30**	Furring channel 70 x 30 / 1 x 12.5	12	1.3	1.2	-	350 500	6 3	59 61	6 6	72 72
	Furring channel 70 x 30 / 1 x 15	14	1.1	1.0	1.0	350 500	6 3	59 61	6 6	72 72
	Furring channel 70 x 30 / 2 x 12.5	21	0.6	0.6	0.6	350 500	12 10	65 68	6 6	72 72
	Furring channel 70 x 30 / 2 x 12.5	25	0.5	0.5	0.5	350 500	12 10	65 68	6 6	72 72



SINGLE FRAME SUSPENDED

PLADUR® T-45 PROFILE SINGLE FRAME SUSPENDED CEILING

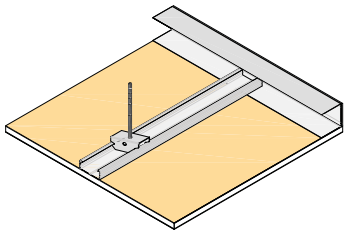
SYSTEM DEFINITION

Suspended ceiling consisting of a galvanised steel plate profile frame using Pladur® **T-45** profiles, suspended from the building structure using Pladur® **T-45** hanger brackets and Ø 6-mm threaded rods, supported on **Pladur®** profiles mechanically attached around the whole perimeter. One or two **Pladur®** boards are screwed to this frame.

FIELD OF APPLICATION

Concealed suspended ceilings for indoor rooms providing fire resistance and acoustic insulation.

Profile	System	Surface mass (kg/m²)	Distance between attachment (m)			Acoustic insulation					Fire resistance
			Frame distance (mm)			Slab surface mass (kg/m²)	Airborne noise (dBA)		Impact noise (dB)		
			400	500	600		Increase ceiling ΔR_A	Slab + Ceiling R_A	Noise reduction by ceiling ΔL_W	Noise reduction slab + Ceiling $L_{n,w}$	
T-45 Pladur® profile	T-45 / 1 x 12,5 (without wool)	12	1.1	1.1	-	350 500	4 3	57 62	6 6	72 72	S/E
	T-45 / 1 x 12.5 MW	12	1.1	1.1	-	350 500	9 7	62 65	8 8	70 70	S/E
	T-45 / 1 x 15 MW	14	1.1	1.1	1.0	350 500	12 9	65 67	8 8	70 70	S/E
	T-45 / 2 x 12.5	22	0.8	0.8	-	350 500	7 7	60 65	8 8	70 70	EI 30(4)(5)
	T-45 / 2 x 12.5 MW	22	0.9	0.9	0.8	350 500	15 13	68 71	8 8	70 70	S/E
	T-45 / 2 x 15 F	29	0.6	0.6	-	350 500	7 7	60 65	8 8	70 70	EI 60(4)(5)
	T-45 / 3 x 15 F	41	0.8	0.8	-	350 500	7 7	60 65	8 8	70 70	EI 90(4)(5)



SINGLE FRAME SUSPENDED

PLADUR® WAB T-45 Z5 PROFILE SINGLE FRAME SUSPENDED CEILING

SYSTEM DEFINITION

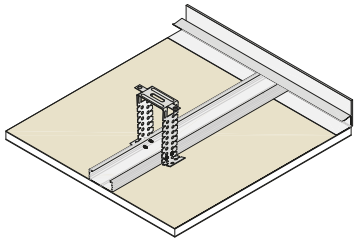
Suspended ceiling consisting of a galvanised steel plate profile frame using Pladur® **T-45 Z5** profiles, suspended from the building structure using Pladur® **T-45 Z5** hanger brackets and Ø 6-mm threaded rods (M6 Z5), supported on Pladur® **C48/47 XL Z5** U-tracks mechanically attached around the whole perimeter. One Pladur® **WAB** board is screwed to this frame.

FIELD OF APPLICATION

Continuous suspended ceilings for interior rooms exposed to high humidity.

Profile	System	Surface mass (kg/m²)	Distance between attachment (m)			Acoustic insulation				
			Frame distance (mm)			Slab surface mass (kg/m²)	Airborne noise (dBA)		Impact noise (dB)	
			300	400	500		Increase ceiling ΔR_A	Slab + Ceiling R_A	Noise reduction by ceiling ΔL_W	Noise reduction slab + Ceiling $L_{n,w}$
T-45 Z5 Pladur® profile	T-45 / 1 x 12.5 (without wool)	12.3	1.5	1.4	1.3	350 500	4 3	57 62	6 6	72 72
	T-45 / 1 x 12.5 MW	12.3	1.4	1.3	1.2	350 500	9 7	62 65	8 8	70 70

The hanger fasteners must withstand a minimum allowable tensile load of **22 kg** (as declared by the manufacturer), and the perimeter fasteners must withstand a minimum allowable shear load of **15 kg**.



SINGLE FRAME SUSPENDED

PLADUR® T-45 + PL PROFILES SINGLE FRAME SUSPENDED CEILING

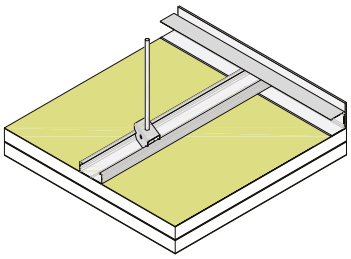
SYSTEM DEFINITION

Suspended ceiling consisting of a galvanised steel plate profile frame using Pladur® **T-45** profiles or studs, suspended from the base structure using Pladur® **PL** profiles and Ø 6-mm threaded rods, supported on **Pladur®** profiles mechanically attached around the whole perimeter. One or two **Pladur®** boards are screwed to this frame.

FIELD OF APPLICATION

Concealed suspended ceilings for indoor rooms with acoustic insulation. For building work that requires a small plenum space.

Profile	System	Surface mass (kg/m²)	Distance between attachment (m)			Acoustic insulation				
			Frame distance (mm)			Slab surface mass (kg/m²)	Airborne noise (dBA)		Impact noise (dB)	
			400	500	600		Increase ceiling ΔR_A	Slab + Ceiling R_A	Noise reduction by ceiling ΔL_W	Noise reduction slab + Ceiling $L_{n,w}$
T-45 Pladur® profile	T-45 + PL75 / 1 x 12.5 MW	12	1.1	1.1	-	350 500	15 8	68 66	8 8	70 70
	T-45 + PL75 / 1 x 15 MW	14	1.1	1.1	1.0	350 500	12 9	65 67	7 7	71 71
	T-45 + PL75 / 2 x 12.5 MW	22	0.9	0.9	0.8	350 500	15 13	68 71	8 8	70 70



SINGLE FRAME SUSPENDED

PLADUR® MAGNA T-45 PROFILE SINGLE FRAME SUSPENDED CEILING

SYSTEM DEFINITION

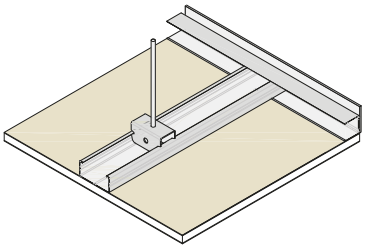
Suspended ceiling consisting of a galvanised steel plate profile frame using Pladur® **T-45** profiles, suspended from the building structure using Pladur® **T-45** hanger brackets and Ø 6-mm threaded rods, supported on **Pladur®** profiles mechanically attached around the whole perimeter every 400 mm. Two Pladur® **MAGNA** boards are screwed to this frame.

FIELD OF APPLICATION

Continuous suspended ceilings for interior rooms with fire resistance and acoustic insulation features.

Profile	System	Surface mass (kg/m²)	Distance between attachment (m)	Acoustic insulation					Fire resistance
			Frame distance (mm)	Slab surface mass (kg/m²)	Airborne noise (dBA)		Impact noise (dB)		
			500		Increase ceiling ΔR_A	Slab + Ceiling R_A	Noise reduction by ceiling ΔL_W	Noise reduction slab + Ceiling $L_{n,w}$	Ⓜ Ⓜ
T-45 Pladur® profile	T-45 / 2 X 25 MAGNA MW	43	0.90	350 500	15 13	68 71	8 8	70 70	EI 120[5]

Ⓜ Pladur® **MAGNA** board Ⓜ Pladur® **MAGNA H1** board



SINGLE FRAME SUSPENDED

PLADUR® T-60 PROFILES SINGLE FRAME SUSPENDED CEILING

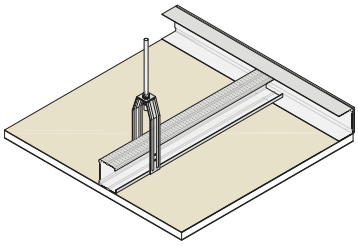
SYSTEM DEFINITION

Suspended ceiling consisting of a galvanised steel plate profile frame using Pladur® **T-60** profiles, suspended from the building structure using Pladur® **T-60** hanger brackets and Ø 6-mm threaded rod, supported on **Pladur®** profiles mechanically attached around the whole perimeter. One or more **Pladur®** boards are screwed to this frame.

FIELD OF APPLICATION

Continuous suspended ceilings for interior rooms with acoustic insulation features.

Profile	System	Surface mass (kg/m²)	Distance between attachment (m)			Acoustic insulation				
			Frame distance (mm)			Slab surface mass (kg/m²)	Airborne noise (dBA)		Impact noise (dB)	
			400	500	600		Increase ceiling ΔR_A	Slab + Ceiling R_A	Noise reduction by ceiling ΔL_W	Noise reduction slab + Ceiling $L_{n,w}$
T-60 Pladur® profile	T-60 / 1 x 12.5 MW	13	1.4	1.4	-	350 500	11 8	64 66	9 9	69 69
	T-60 / 1 x 15 MW	15	1.4	1.3	1.2	350 500	12 10	65 68	8 8	70 70
	T-60 / 2 x 12.5 MW	22	1.3	1.2	1.1	350 500	14 13	67 71	9 9	69 69
	T-60 / 2 x 15 MW	26	1.3	1.2	1.1	350 500	15 14	68 72	8 8	70 70



SINGLE FRAME SUSPENDED

PLADUR® STUDS SINGLE FRAME CEILING

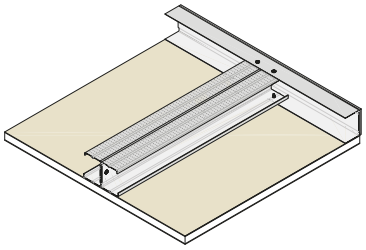
SYSTEM DEFINITION

Suspended ceiling consisting of a galvanised steel plate profile frame using **Pladur®** studs, suspended from the base structure using **Pladur®** suspension parts and Ø 6-mm threaded rods, supported on **Pladur®** U-tracks mechanically attached around the whole perimeter. One or more **Pladur®** boards are screwed to this frame.

FIELD OF APPLICATION

Concealed suspended ceilings for indoor rooms providing acoustic insulation. Where a greater distance is required between hangers.

Profile	System	Surface mass (kg/m²)	Distance between attachment (m)			Acoustic insulation				
			Frame distance (mm)			Slab surface mass (kg/m²)	Airborne noise (dBA)		Impact noise (dB)	
			400	500	600		Increase ceiling ΔR_A	Slab + Ceiling R_A	Noise reduction by ceiling ΔL_W	Noise reduction slab + Ceiling $L_{n,w}$
M 48-35 Pladur® stud	M-48-35 / S35 / 1 x 12.5 MW	12	2.00	2.00	-	350 500	11 8	64 66	9 9	69 69
	M-48-35 / S35 / 1 x 15 MW	14	1.95	1.95	1.95	350 500	12 10	65 68	9 9	69 69
	M-48-35 / S35 / 2 x 12.5 MW	21	1.80	1.80	1.80	350 500	14 13	67 71	9 9	69 69
M 70-35 Pladur® stud	M-70-35 / S35 / 1 x 12.5 MW	12	2.55	2.55	-	350 500	11 8	64 66	9 9	69 69
	M-70-35 / S35 / 1 x 15 MW	14	2.45	2.45	2.45	350 500	13 11	66 69	9 9	69 69
	M-70-35 / S35 / 2 x 12.5 MW	21	2.25	2.25	2.25	350 500	15 13	68 71	9 9	69 69
M 90 Pladur® stud	M-90 / S50 / 1 x 12.5 MW	12	2.90	2.90	-	350 500	11 9	64 67	9 9	69 69
	M-90 / S50 / 1 x 15 MW	14	2.80	2.80	2.80	350 500	13 11	66 69	9 9	69 69
	M-90 / S50 / 2 x 12.5 MW	21	2.50	2.50	2.50	350 500	15 14	68 72	9 9	69 69



HANGER-FREE

PLADUR® HANGER-FREE CEILING

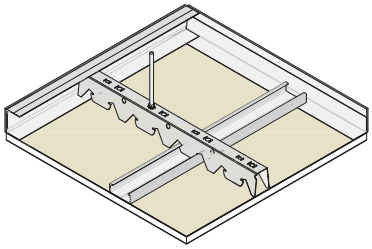
SYSTEM DEFINITION

Continuous ceiling consisting of a single frame using **Pladur®** studs, supported on lateral load-bearing walls by **Pladur®** U-tracks and mechanically attached around the whole perimeter. One **Pladur®** board is screwed to this profile frame.

FIELD OF APPLICATION

Continuous ceilings in cases where hangers cannot be used, providing acoustic insulation.

Profile	System	Surface mass (kg/m²)	Distance between attachment (m)			Acoustic insulation				
			Frame distance (mm)			Slab surface mass (kg/m²)	Airborne noise (dBA)		Impact noise (dB)	
			400	500	600		Increase ceiling ΔR_A	Slab + Ceiling R_A	Noise reduction by ceiling ΔL_W	Noise reduction slab + Ceiling $L_{n,w}$
M 48-35 Pladur® stud	M-48-35 / SC / 1 x 12.5 MW	12	1.80	1.80	-	350 500	11 8	64 66	8 8	70 70
	M-48-35 / SC / 1 x 15 MW	14	1.80	1.80	1.80	350 500	12 9	65 67	7 7	71 71
M 48-35 (H) Pladur® stud	M-48-35 (H) / SC / 1 x 12.5 MW	14	2.15	2.15	-	350 500	11 8	64 66	8 8	70 70
	M-48-35 (H) / SC / 1 x 15 MW	16	2.15	2.15	2.15	350 500	12 9	65 67	7 7	71 71



TWIN FRAME SUSPENDED

PLADUR® PH-45 + T-45 PROFILES TWIN FRAME SUSPENDED CEILING

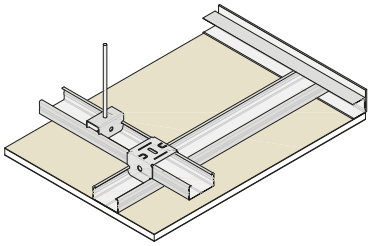
SYSTEM DEFINITION

Ceiling consisting of a twin frame, installed at different levels. The primary frame consists of continuous Pladur® **PH-45** profiles, suspended from the base structure by Ø 6 mm. The secondary frame consists Pladur® **T-45** profiles attached perpendicularly to the bottom of the primary frame by slotting directly into the punched double hanger brackets of the Pladur® **PH-45** profile and supported around the perimeter on **Pladur®** L profiles or Pladur® **CLIP** U-tracks. One or more **Pladur®** boards are screwed perpendicularly to the secondary frame.

FIELD OF APPLICATION

Concealed suspended ceilings for indoor rooms providing acoustic insulation. They are easier to install and provide greater consistency due to the twin frames laid out crosswise to each other.

Profile	System	Surface mass (kg/m²)	Distance between attachment (m)			Main frame distance (m)			Acoustic insulation				
			Secondary frame distance (mm)						Slab surface mass (kg/m²)	Airborne noise (dBA)		Impact noise (dB)	
			400	500	600	400	500	600		Increase ceiling ΔR_A	Slab + Ceiling R_A	Noise reduction by ceiling ΔL_W	Noise reduction slab + Ceiling $L_{n,w}$
PH-45 Pladur® profile	PH-45 + T-45 / 1 x 12.5 MW	13	0.85	0.85	-	1.1	1.1	-	350 500	9 7	62 65	8 8	70 70
+	PH-45 + T-45 / 1 x 15 MW	15	0.85	0.85	0.9	1.1	1.1	1.0	350 500	11 10	64 68	8 8	70 70
T-45 Pladur® profile	PH-45 + T-45 / 2 x 12.5 MW	23	0.8	0.8	0.8	0.9	0.9	0.8	350 500	13 12	66 70	9 9	69 69



TWIN FRAME SUSPENDED

PLADUR® T-60 (D) PROFILES TWIN FRAME SUSPENDED CEILING

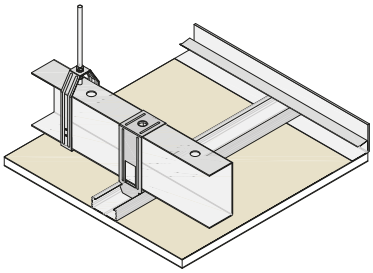
SYSTEM DEFINITION

Ceiling consisting of a twin frame installed at different levels (D). The primary frame consists of continuous Pladur® **T-60** profiles, suspended from the base structure by Pladur® **T-60** hanger brackets and Ø 6 mm threaded rods. The secondary frame consists Pladur® **T-60** profiles, suspended from the primary frame by the Pladur® **T-60** clamp supported around the perimeter on the L profile or **Pladur®** U-track. One or more **Pladur®** boards are screwed perpendicularly to the secondary frame.

FIELD OF APPLICATION

Concealed suspended ceilings for indoor rooms providing acoustic insulation. They are easier to install and provide greater consistency due to the twin frames laid out crosswise to each other. Joining both frames using Pladur® **T-60** clamps creates a structure (mobile attachment) that allows the boards to be adjusted during assembly.

Profile	System	Surface mass (kg/m²)	Distance between attachment (m)			Main frame distance (m)			Acoustic insulation				
			Secondary frame distance (mm)						Slab surface mass (kg/m²)	Airborne noise (dBA)		Impact noise (dB)	
			400	500	600	400	500	600		Increase ceiling ΔR_A	Slab + Ceiling R_A	Noise reduction by ceiling ΔL_W	Noise reduction slab + Ceiling $L_{n,w}$
T-60 (D) Pladur® profile	T-60 (D) / 1 x 12.5 MW	13	1.00	1.00	-	1.40	1.35	-	350 500	9 8	62 66	11 11	67 67
	T-60 (D) / 1 x 15 MW	15	1.00	1.00	1.10	1.40	1.30	1.20	350 500	11 10	64 68	11 11	67 67
	T-60 (D) / 2 x 12.5 MW	23	1.00	1.00	1.00	1.10	1.10	1.10	350 500	13 12	66 70	11 11	67 67



TWIN FRAME SUSPENDED

PLADUR® GL + T-45 PROFILES TWIN FRAME SUSPENDED CEILING

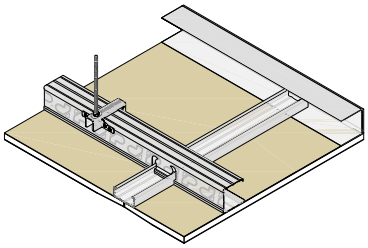
SYSTEM DEFINITION

Ceiling consisting of a twin frame installed at different levels. The primary frame consists of continuous 1.5-mm thick Pladur® **GL** U-tracks, suspended from the base structure using Pladur® **M-50** suspensions and Ø 6 mm threaded rods with nut and lock-nut. The second frame consisting of Pladur® **T-45** profiles is slotted together using Pladur® **GL** clamps perpendicular to the primary frame and supported around the perimeter on Pladur® **L** profiles or Pladur® **CLIP** U-tracks. One or more **Pladur®** boards are screwed perpendicularly to the secondary frame.

FIELD OF APPLICATION

Concealed suspended ceilings for indoor rooms providing acoustic insulation. Especially indicated for ceilings that require large spans between hangers.

Profile	System	Surface mass (kg/m²)	Distance between attachment (m)			Main frame distance (m)			Acoustic insulation				
			Secondary frame distance (mm)						Slab surface mass (kg/m²)	Airborne noise (dBA)		Impact noise (dB)	
			400	500	600	400	500	600		Increase ceiling ΔR_A	Slab + Ceiling R_A	Noise reduction by ceiling ΔL_W	Noise reduction slab + Ceiling $L_{n,w}$
Pladur® U-TRACK **GL** + **T-45** Pladur® profile	GL + T-45 / 1 x 12.5 MW	14	3.1	3.1	-	1.1	1.1	-	350 500	10 8	63 66	8 8	70 70
	GL + T-45 / 1 x 15 MW	16	3.0	3.0	3.0	1.1	1.1	1.1	350 500	11 10	64 68	8 8	70 70
	GL + T-45 / 2 x 12.5 MW	24	2.9	2.9	2.9	0.9	0.9	0.9	350 500	13 12	66 70	8 8	70 70



NEO

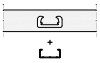
PLADUR® LIGHT NEO SUSPENDED CEILING

SYSTEM DEFINITION

Ceiling consisting of a twin frame made from profiles installed at the same level. The primary frame of Pladur® **NEO P** profiles, suspended from the base structure using Pladur® **NEO** hanger clips and Ø 6 mm threaded rods supported on Pladur® **NEO CP** profiles at the perimeter. The secondary frame of Pladur® **NEO S** profiles assembled perpendicularly using clip joints to attach them to the primary frame in the punched core and attached to the Pladur® **NEO CP** perimeter profiles using Pladur® **MM** screws. A Pladur® **Ultra L-TEC** board is screwed perpendicularly to the primary frame. Justified by Technical Conformity TC-087066 certificate.

FIELD OF APPLICATION

Continuous suspended ceilings for indoor rooms. They are easier to install and provide greater consistency due to the twin frames laid out crosswise to each other. In areas with medium moisture levels, Pladur® **Ultra L-TEC H1** boards with secondary frame spacing every 400 mm should be installed.

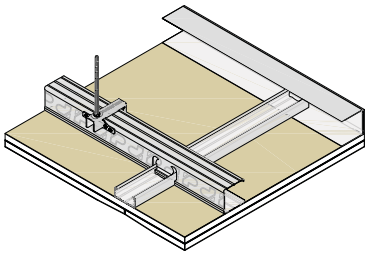
Profile	System group	Surface mass (kg/m²)	Distance between attachment (m)	Main frame distance (m)
			Secondary frame distance (mm)	
			600/400*	600/400*
NEO P-48 Pladur® profile  **NEO S-1.000**	NEO / 1 x 12.5 ULTRA L-TEC MW	7.9	1.65	1.00
	NEO / 1 x 12.5 ULTRA L-TEC H1 MW	9.4	1.65	1.00

*In areas with medium moisture levels, Pladur® **ULTRA L-TEC H1** boards with secondary frame spacing every **400 mm** should be installed.

Premises with a wind load equal to or lower than **10 kg/m²**. Permitted use load **1.2 kg/m²** and mineral wool up to **3 kg/m²**.

The fixing points for the hangers must be able to support a minimum permitted tensile load of **50 kg** (declared by the manufacturer). In addition, the fixing points for the perimeter profiles must support a minimum permitted shear load of **11 kg**.

The Pladur® **NEO CP-48** perimeter profile fixing point to the support should be spaced every **600 mm**.



NEO

PLADUR® BOARD WIDTH 1200 mm NEO SUSPENDED CEILING

SYSTEM DEFINITION

Ceiling consisting of a twin frame made from profiles installed at the same level. The primary frame of Pladur® **NEO P** profiles, suspended from the base structure using Pladur® **NEO** hanger clips and Ø 6 mm threaded rods supported on Pladur® **NEO CP** profiles at the perimeter. The secondary frame of Pladur® **NEO S** profiles assembled perpendicularly using clip joints to attach them to the primary frame in the punched core and attached to the Pladur® **NEO CP** perimeter profiles using Pladur® **MM** screws. One or two **Pladur®** board are screwed perpendicularly to the primary frame. Justified by Technical Conformity TC-087066 certificate.

FIELD OF APPLICATION

Continuous suspended ceilings for indoor rooms providing acoustic insulation and fire resistance. They are easier to install and provide greater consistency due to the twin frames laid out crosswise to each other. In areas with medium moisture levels, Pladur® **H1** or Pladur® **OMNIA** boards with secondary frame spacing every 400 mm should be installed.

Profile	System	Surface mass (kg/m²)	Distance between attachment (m)	Main frame distance (m)	Acoustic insulation					Fire resistance
			Secondary frame distance (mm)		Slab surface mass (kg/m²)	Airborne noise (dBA)		Impact noise (dB)		
			600/400*	600/400*		Increase ceiling ΔR_A	Slab + Ceiling R_A	Noise reduction by ceiling ΔL_w	Noise reduction slab + Ceiling $L_{n,w}$	
NEO P-48 Pladur® profile + **NEO S-1.200**	NEO / 1 x 12.5 N MW	10	1.45	1.20	375	16	71.5	17	61	S/E
	NEO / 1 x 12.5 H1 MW	10.4	1.45	1.20	375	16	71.5	17	61	S/E
	NEO / 1 x 15 N MW	11.8	1.45	1.20	375	17	73.3	17	61	S/E
	NEO / 1 x 15 H1 MW	12.2	1.45	1.20	375	17	73.3	17	61	S/E
NEO P-48 Pladur® profile + **NEO S-1.000**	NEO / 1 x 12.5 N MW	10.1	1.65	1.00	375	14	70.8	19	57	S/E
	NEO / 1 x 12.5 Air N MW	10.1	1.65	1.00	375	14	70.8	19	57	S/E
	NEO / 1 x 12.5 H1 MW	10.5	1.65	1.00	375	14	70.8	19	57	S/E
	NEO / 1 x 12.5 OMNIA MW	14.3	1.65	1.00	375	16	72.5	16	61	S/E
	NEO / 1 x 15 N MW	11.9	1.60	1.00	375	15	71.7	15	61	S/E
	NEO / 1 x 15 H1 MW	12.3	1.60	1.00	375	15	71.7	15	61	S/E
	NEO / 1 x 15 OMNIA MW	16.8	1.60	1.00	375	15	72	15	62	S/E
	NEO / 2 x 12.5 N GW	18.8	1.50	1.00	375	16	73.6	21	55	EI 30
	NEO / 2 x 15 F GW	26.2	1.40	1.00	375	16	73.6	19	58	EI 60
	NEO / 2 x 15 OMNIA GW	31.8	1.40	1.00	375	16	73.6	19	58	EI 60

*In areas with medium moisture levels, Pladur® **H1** or Pladur® **OMNIA** boards with secondary frame spacing every **400 mm** should be installed.

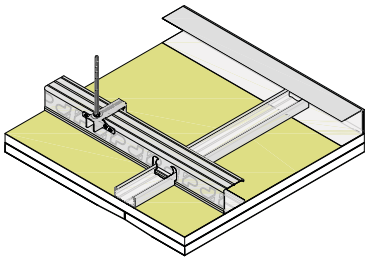
The test certificate installation conditions must be observed in systems with fire resistance requirements. Tests performed with **≤ 1,3 m²K/W** heat resistant glass wool and a surface mass **≤ 0,83 kg/m²** or without wool. For more information see the classification report.

Premises with a wind load equal to or lower than **10 kg/m²**. Permitted use load **1,2 kg/m²** and mineral wool up to **3 kg/m²** for primary spacing of **1,2 m** and up to **5 kg/m²** for primary spacing of **1,0 m**.

Acoustic tests performed with 150 mm and 375 kg/m² reinforced concrete slab, 46 mm thick and 18 kg/m³ mineral wool, and 150 mm plenum.

The fixing points for the hangers must be able to support a minimum permitted tensile load of **85 kg** (declared by the manufacturer). In addition, the fixing points for the perimeter profiles must support a minimum permitted shear load of **15 kg**.

The Pladur® **NEO CP-48** perimeter profile fixing point to the support should be spaced every **600 mm**. This distance is reduced to **300 mm** for systems with fire resistance requirements.



NEO

PLADUR® MAGNA NEO SUSPENDED CEILING

SYSTEM DEFINITION

Ceiling consisting of a twin frame made from profiles installed at the same level. The primary frame of Pladur® **NEO P** profiles, suspended from the base structure using Pladur® **NEO** hanger clips and Ø 6 mm threaded rods supported on Pladur® **NEO CP** profiles at the perimeter. The secondary frame of Pladur® **NEO S** profiles assembled perpendicularly using clip joints to attach them to the primary frame in the punched core and attached to the Pladur® **NEO CP** perimeter profiles using Pladur® **MM** screws. Two Pladur® **MAGNA** board are screwed perpendicularly to the primary frame. Justified by Technical Conformity TC-087066 certificate.

FIELD OF APPLICATION

Continuous suspended ceilings for indoor rooms providing acoustic insulation and fire resistance. They are easier to install and provide greater consistency due to the twin frames laid out crosswise to each other. In areas with medium moisture levels, Pladur® **MAGNA H1** boards should be installed.

Profile	System	Surface mass (kg/m²)	Distance between attachment (m)	Main frame distance (m)	Acoustic insulation					Fire resistance
			Secondary frame distance (mm)		Slab surface mass (kg/m²)	Airborne noise (dBA)		Impact noise (dB)		
			450	450		Increase ceiling ΔR_A	Slab + Ceiling R_A	Noise reduction by ceiling ΔL_W	Noise reduction slab + Ceiling $L_{n,W}$	Ⓜ Ⓜ
NEO P-48/450 Pladur® profile + **NEO S-1.000**	NEO / 2 x MAGNA 18 GW	35.6	1.30	1.00	375	17	73.7	20	56	EI 90
	NEO / 2 x MAGNA H1 18 GW	35.6	1.30	1.00	375	17	73.7	20	56	EI 90
	NEO / 2 x MAGNA 25 GW	43.6	1.20	1.00	375	18	74.9	22	55	EI 120
	NEO / 2 x MAGNA H1 25 GW	43.6	1.20	1.00	375	18	74.9	22	55	EI 120

*In areas with medium moisture levels, Pladur® **MAGNA H1** boards should be installed.

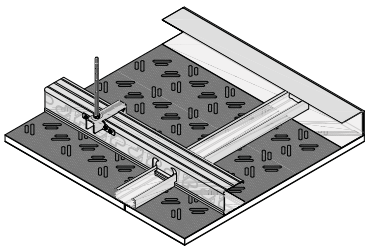
Premises with a wind load equal to or lower than **10 kg/m²**. Permitted use load **1,2 kg/m²** band mineral wool up to **3 kg/m²**.

The test certificate installation conditions must be observed in systems with fire resistance requirements. Tests performed with **≤ 1,3 m² K/W** heat resistant glass wool and a surface mass **≤ 0,83 kg/m²** or without wool. For more information see the classification report.

Acoustic tests performed with 150 mm and 375 kg/m² reinforced concrete slab, 46 mm thick and 18 kg/m³ mineral wool, and 150 mm plenum.

The fixing points for the hangers must be able to support a minimum permitted tensile load of **90 kg** (declared by the manufacturer). In addition, the fixing points for the perimeter profiles must support a minimum permitted shear load of **15 kg**.

The Pladur® **NEO CP-48** perimeter profile fixing point to the support should be spaced every **600 mm**. This distance is reduced to **300 mm** for systems with fire resistance requirements.



NEO

PLADUR® FON+ NEO CANCEALED ACOUSTIC CEILING

SYSTEM DEFINITION

Ceiling consisting of a twin frame made from profiles installed at the same level. The primary frame of Pladur® **NEO P** profiles, suspended from the base structure using Pladur® **NEO** hanger clips and Ø 6 mm threaded rods supported on Pladur® **NEO CP** profiles at the perimeter. The secondary frame of Pladur® **NEO S** profiles assembled perpendicularly using clip joints to attach them to the primary frame in the punched core and attached to the Pladur® **NEO CP** perimeter profiles using Pladur® **MM** screws. A Pladur® **FON+** board is screwed perpendicularly to the primary frame. Justified by Technical Conformity TC-087066 certificate.

FIELD OF APPLICATION

Continuous ceilings that require special acoustic conditioning for classrooms, boardrooms, libraries, etc. They are easier to install and provide greater consistency due to the twin frames laid out crosswise to each other.

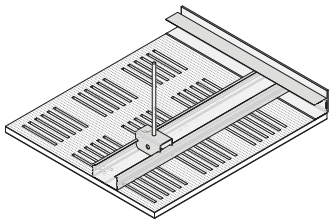
Profile	System group	System	Board type	Surface mass (kg/m²)	Distance between attachment (m)	Main distance (m)	Modulación estructura secundaria (m)
			FON+				
NEO P-48/400 Pladur® profile + **NEO S-1.200**	Twin frame: NEO continuous ceiling	NEO P-48/400 + NEO S-1.200 / 1 x 13 FON+ MW	PLADUR® FON+ BV PLADUR® FON+ BA	12.2	1.45	1.20	0.40

Permitted use load **1,2 kg/m²** and mineral wool up to **3 kg/m²**.

The fixing points for the hangers must be able to support a minimum permitted tensile load of **60 kg** (declared by the manufacturer). In addition, the fixing points for the perimeter profiles must support a minimum permitted shear load of **12 kg**.

The Pladur® **NEO CP-48** perimeter profile fixing point to the support should be spaced every **600 mm**.

Ⓜ Pladur® **MAGNA** board Ⓜ Pladur® **MAGNA H1** board



ACOUSTIC CONDITIONING AND DECORATIVE

PLADUR® FON+ T-60 PROFILES CONCEALED ACOUSTIC CEILING

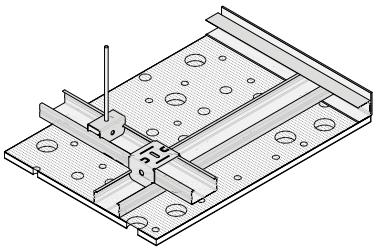
SYSTEM DEFINITION

Suspended ceiling consisting of a galvanised steel plate profile frame using Pladur® **T-60** with 300 mm spacing, suspended from the base structure using Pladur® **T-60** hanger brackets and Ø 6-mm threaded rod, supported on **Pladur®** profiles mechanically attached around the whole perimeter. A Pladur® **FON+** board is screwed to this frame.

FIELD OF APPLICATION

Continuous ceilings that require special acoustic conditioning for classrooms, boardrooms, libraries, etc.

Profile	System group	System	Board type	Surface mass (kg/m²)	Distance between hangers (m)	Main distance (m)
			FON+			
T-60 Pladur® profile	Single frame: continuous ceiling T-60	T-60/1 x 13 FON+ MW	PLADUR® FON+ BV PLADUR® FON+ BA	14	1.2	0.3



ACOUSTIC AND DECORATIVE CONDITIONING

PLADUR® FON+ T-60 (D) PROFILES CONCEALED ACOUSTIC CEILING

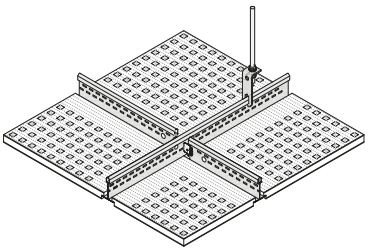
SYSTEM DEFINITION

Ceiling consisting of a twin frame installed at different levels (D). The primary frame consists of continuous Pladur® **T-60** profiles, suspended from the base structure by Pladur® **T-60** hanger brackets and Ø 6 mm threaded rods. The secondary frame consists Pladur® **T-60** profiles with 300 mm spacing, suspended from the primary frame by the Pladur® **T-60** clamp supported around the perimeter on the L profile or U-track. One or more Pladur® **FON+** boards are screwed perpendicularly to the secondary frame.

FIELD OF APPLICATION

Continuous ceilings that require special acoustic conditioning for classrooms, boardrooms, libraries, etc. They are easier to install and provide greater consistency due to the double frames laid out crosswise to each other. Joining both frames using Pladur® **T-60** clamps creates a structure (mobile attachment) that allows the boards to be adjusted during assembly.

Profile	System group	System	Board type	Surface mass (kg/m²)	Distance between hangers (m)	Primary frame modular interval (m)	Secondary frame modular interval (m)
			FON+				
T-60 (D) Pladur® profile	Twin frame: continuous ceiling T-60 (D) (clamp)	T-60/1 x 13 FON+ MW	PLADUR® FON+ BV PLADUR® FON+ BA	15	0.90	0.7	0.3
					0.85	1.0	0.3
					0.80	1.2	0.3
					0.75	1.3	0.3
					0.70	1.4	0.3
					0.60	1.5	0.3



ACOUSTIC AND DECORATIVE CONDITIONING

PLADUR® FON+ AND DECOR TEE GRID CEILING

SYSTEM DEFINITION

Tee grid ceiling consisting of a galvanised steel plate profile frame coated with a pre-lacquered laminate on the visible side. This frame forms a 600x600-mm square consisting of Pladur® galvanised steel main runners, cross tees and L profiles attached mechanically around the whole perimeter. The frame is suspended from the base structure by anchors, threaded rods and Pladur® **TR** hanger clips, which support the Pladur® **FON+** and **DECOR** boards.

FIELD OF APPLICATION

Tee grid ceilings that require special acoustic conditioning for classrooms, boardrooms, libraries, etc.

Profile	System group	System	Board type	Surface mass (kg/m²)	Distance between hangers (m)	Primary frame modular interval (m)	Secondary frame modular interval (m)
			FON+				
TR Pladur® profile	Pladur® tee grid ceilings	Tee grid ceilings FON+	PLADUR® FON+ PLADUR® FON+ DECOR	11	1,2	1,2	0,6
		Tee grid ceilings 1.200 x 600 10	PLADUR® DECOR	10			
		Tee grid ceilings 600 x 600 10					
		Tee grid ceilings 1.200 x 600 13		12			
		Tee grid ceilings 600 x 600 13					

TECHNICAL NOTES AND CONSIDERATIONS

MECHANICAL RESISTANCE:
Systems with a single 12.5-mm board and distance on stud centres of 600 mm are not considered.

The maximum hanger-free length of the ceilings is 2 m, from top attachment to support.

The surface mass indicated in the tables is based on systems with Pladur® **N**, Pladur® **F**, Pladur® **WAB**, Pladur® **MAGNA** or Pladur® **FON+** boards, depending on the corresponding system.

FIRE RESISTANCE:
Please, pay attention to test certificate execution condition.

S/E: Classification untested.

(4) System valid for fire classification with 400-mm stud on centres.

(5) System valid for fire classification with 500-mm stud on centres.

Wall lining, partition wall and ceiling systems with Pladur® **H1** board can assume the same fire resistance classification as the Pladur® **N** board performance test. The results may be extrapolated if indicated in the building code norm and in accordance with the extension reports.

Wall lining, partition wall and ceiling systems with Pladur® **OMNIA** boards can assume the same fire resistance classification as the Pladur® **F** board performance test. The results may be extrapolated if indicated in the building code norm and in accordance with the extension report.

Wall lining, partition wall and ceiling systems with Pladur® **MAGNA H1** boards can assume the same fire resistance classification as the Pladur® **MAGNA** boards performance test. The results may be extrapolated if indicated in the building code norm and in accordance with the extension report.

THERMAL INSULATION:
MW: Mineral wool (both glass wool and rock wool) with a U-value of λ = 0,036 W/mK and variable thickness.

GW: Glass wool

CONTINUOUS CEILINGS

Technology
Pladur® AIR
Improves the quality of indoor air

Pladur® **FON+**

Pladur® brings together acoustics and aesthetics with the Pladur® **FON+**, a new range of laminated plasterboards with perforations of different shapes and sizes. Pladur® **FON+** improves the acoustic absorption of the premises where it is installed, achieving a great degree of flexibility in the design of spaces and shapes. In addition, the entire Pladur® **FON+** range now features Pladur® **AIR** technology to improve indoor air quality.

The range of Pladur® **FON+** continuous ceilings comprises plasterboards with special characteristics and preparations. The dimensions are: 13 mm thickness, 1,200 mm width and 2,400 mm length. Different types of perforations are available: Circular (R), Square (C), and longitudinal (L). The rear incorporates an acoustic veil designed to improve absorption and create a barrier to protect from dust and particles, available in black or white. Pladur® **FON+** plasterboards are treated with a white primer that protects them from ultraviolet radiation.

Application: Pladur® **FON+** plasterboards improve the acoustic comfort wherever they are installed, but they are especially suitable for public spaces, such as hotels, cinemas, restaurants, cafeterias, events rooms, shopping centres, etc. They are also ideal for common areas in buildings or homes (hallways, vestibules, entrances, etc.).

Product thickness	Measurements (mm)*	Edge	Reaction to fire	Units per pallet	Standard	Marked
Pladur® **FON+ TC** 13	1 200 x 2 400	BA / BV	A2-s1, d0	30/20	EN 14190	CE/DAP/A+

* To validate dimensions and tolerances, consult the product technical datasheets.

With regard to the distribution of the perforations, there are two types of boards available:

Pladur® **FON+** BA TAPERED EDGE

Tapered edge plasterboards perforations grouped into blocks, leaving the edges of the boards and lanes along the boards un-perforated.

Design according to perforation by blocks

Number 1

Number 2

Number 4

Number 8

Number 32

Pladur® **FON+** BV V EDGE

With perforations distributed uniformly across the entire surface of the board.

Uniform perforations

TECHNICAL CHARACTERISTICS

Board type	Model	% perforation	Plenum of 600 mm With mineral wool of 80 mm				
			αw	αm	NRC	Class	Essay reference
Pladur® **FON+** BA TAPERED EDGE thickness x width x length (mm)* 13x1200x2400	FON+ C 8/18 N.° 2 BA	15.00	0.70	0.72	0.70	C	CEE/022/12-6-R1
	FON+ C 12/25 N.° 8 BA	16.00	0.70 L	0.70	0.70	C	CEE/022/12-5-R1
	FON+ C 12/25 N.° 32 BA	10.30	0.50 L	0.57	0.60	D	CEE/022/12-8-R1
	FON+ R 12/25 N.° 2 BA	13.90	0.65 L	0.68	0.70	C	CEE/022/12-9
	FON+ R 15/30 N.° 8 BA	11.10	0.55 L	0.60	0.60	D	CEE/022/12-10
	FON+ L 5 x 80 N.° 2 BA	13.60	0.60	0.62	0.60	C	CTA 350/12/R
	FON+ L 5 x 80 N.° 8 BA	10.70	0.50 L	0.53	0.55	D	CTA 354/12/R
Pladur® **FON+** BV V EDGE thickness x width x length (mm)* 13x1200x2400	FON+ C 8/18 BV	18.30	0.75	0.78	0.75	C	CEE/022/12-1-R1
	FON+ C 12/25 BV	23.10	0.85	0.83	0.85	B	CEE/022/12-14-R1
	FON+ R 6/18 BV	8.10	0.55	0.53	0.55	D	CEE/022/12-3-R1
	FON+ R 8/18 BV	14.30	0.70	0.70	0.70	C	CEE/022/12-2-R1
	FON+ R 12/25 BV	18.20	0.75	0.73	0.70	C	CTA 140007/R-1
	FON+ R 15/30 BV	19.70	0.80	0.82	0.80	B	CEE/022/12-11
	FON+ R Altern. 8-12/50 BV	13.10	0.70	0.68	0.65	C	CEE/022/12-4-R1
	FON+ R Aleat. 8-15-20 BV	10.20	0.55 L	0.60	0.60	D	CEE/022/12-12
	FON+ R Aleat. Plus 12-20-35 BV	9.80	0.50 L	0.53	0.55	D	CEE/022/12-13

Board type	Model	% perforation	Plenum of 400 mm									
			Without mineral wool					With mineral wool of 60 mm				
			αw	αm	NRC	Class	Essay reference	αw	αm	NRC	Class	Essay reference
Pladur® FON+ BV V EDGE thickness x width x length (mm)* 13x1200x2400	FON+ Crystal 14 BV	14.00	0.60	0.57	0.60	C	AC18-26076829-D/58	0.60	0.59	0.60	C	AC18-26076829-D/61
	FON+ Tweed 14 BV	14.00	0.60	0.58	0.60	C	AC18-26076829-D/10	0.65	0.62	0.60	C	AC18-26076829-D/13
	FON+ Verde 11 BV	11.40	0.50	0.49	0.50	D	AC18-26076829-D/34	0.55	0.52	0.55	D	AC18-26076829-D/37

Board type	Model	% perforation	Plenum of 200 mm									
			Without mineral wool					With mineral wool of 60 mm				
			αw	αm	NRC	Class	Essay reference	αw	αm	NRC	Class	Essay reference
Pladur® FON+ BA TAPERED EDGE thickness x width x length (mm)* 13x1200x2400	FON+ C 8/18 N.° 1 BA	15.80	0.65 L	0.67	0.65	C	AC15-26055261-14a	0.75	0.72	0.70	C	AC15-26055261-14b
	FON+ C 8/18 N.° 2 BA	15.00	0.65 L	0.67	0.65	C	AC15-26055261-15a	0.75	0.72	0.70	C	AC15-26055261-15/b
	FON+ C 8/18 N.° 4 BA	13.50	0.60 L	0.65	0.65	C	AC15-26055261-16a	0.70	0.67	0.70	C	AC15-26055261-16b
	FON+ C 8/18 N.° 8 BA	12.10	0.60 L	0.62	0.65	C	AC14-26053711/13	0.65 L	0.65	0.65	C	AC14-26053711/23
	FON+ C 12/25 N.° 1 BA	20.30	0.70 L	0.75	0.75	C	AC14-26053711/14	0.80 L	0.82	0.85	B	AC14-26053711/24
	FON+ C 12/25 N.° 2 BA	19.40	0.70 L	0.73	0.75	C	AC14-26053711/15	0.80 L	0.82	0.85	B	AC14-26053711/25
	FON+ C 12/25 N.° 4 BA	17.60	0.65 L	0.72	0.75	C	AC14-26053711/16	0.75 L	0.77	0.80	C	AC14-26053711/26
	FON+ C 12/25 N.° 8 BA	16.00	0.60 L	0.67	0.70	C	AC14-26053711/10	0.75 L	0.75	0.80	C	AC14-26053711/4
	FON+ C 12/25 N.° 32 BA	10.30	0.45 LM	0.55	0.60	D	AC14-26053711/17	0.55 L	0.57	0.60	D	AC14-26053711/27
	FON+ R 12/25 N.° 1 BA	14.90	0.65 L	0.68	0.70	C	AC14-26053711/18	0.70 L	0.73	0.75	C	AC14-26053711/28
	FON+ R 12/25 N.° 2 BA	13.90	0.60 L	0.65	0.70	C	AC14-26053711/20	0.70 L	0.70	0.75	C	AC14-26053711/30
	FON+ R 12/25 N.° 4 BA	11.90	0.55 L	0.58	0.60	D	AC14-26053711/21	0.65 L	0.65	0.70	C	AC14-26053711/31
	FON+ R 12/25 N.° 8 BA	10.20	0.50 LM	0.55	0.60	D	AC14-26053711/19	0.55 L	0.57	0.60	D	AC14-26053711/29
	FON+ R 15/30 N.° 1 BA	16.20	0.65 L	0.67	0.65	C	AC15-26055261-19a	0.75 L	0.72	0.70	C	AC15-26055261-19b
	FON+ R 15/30 N.° 2 BA	15.10	0.65 L	0.65	0.65	C	AC15-26055261-20a	0.70 L	0.67	0.70	C	AC15-26055261-20b
	FON+ R 15/30 N.° 4 BA	12.90	0.55 L	0.62	0.65	D	AC15-26055261-21a	0.65 L	0.65	0.65	C	AC15-26055261-21b
	FON+ R 15/30 N.° 8 BA	11.10	0.50 L	0.57	0.60	D	AC14-26053711/9	0.55 L	0.58	0.60	D	AC14-26053711/6
	FON+ L 5 x 80 N.° 1 BA	14.30	0.55 L	0.62	0.65	D	AC15-26055261-17a	0.65 L	0.65	0.65	C	AC15-26055261-17b
	FON+ L 5 x 80 N.° 2 BA	13.60	0.55 L	0.62	0.60	D	AC15-26055261-18a	0.60 L	0.65	0.65	C	AC15-26055261-18b
	FON+ L 5 x 80 N.° 4 BA	12.10	0.50 LM	0.58	0.60	D	AC14-26053711/51	0.55 L	0.60	0.65	D	AC14-26053711/50
	FON+ L 5 x 80 N.° 8 BA	10.70	0.45 LM	0.53	0.60	D	AC14-26053711/11	0.50 L	0.55	0.60	D	AC14-26053711/5
Pladur® FON+ BV V EDGE thickness x width x length (mm)* 13x1200x2400	FON+ C 8/18 BV	18.30	0.75	0.77	0.75	C	AC14-26053711/8	0.85	0.82	0.85	B	AC14-26053711/7
	FON+ C 12/25 BV	23.10	0.75 L	0.78	0.80	C	AC14-26050500/14	0.90	0.90	0.90	A	AC14-26050500/13
	FON+ R 6/18 BV	8.10	0.50 L	0.55	0.60	D	AC14-26050500/17	0.55 L	0.58	0.60	D	AC14-26050500/12
	FON+ R 8/18 BV	14.30	0.70	0.72	0.70	C	AC14-26050500/15	0.75 L	0.75	0.75	C	AC14-26050500/11
	FON+ R 12/25 BV	18.20	0.70 L	0.77	0.75	C	AC14-26050500/18	0.85	0.82	0.80	B	AC14-26053711/2
	FON+ R 15/30 BV	19.70	0.70 L	0.73	0.75	C	AC14-26053711/52	0.85 L	0.83	0.85	B	AC14-26053711/49
	FON+ R Altern. 8-12/50 BV	13.10	0.35 LM	0.42	0.30	D	AC14-26053711/12	0.55 LM	0.70	0.80	D	AC14-26053711/22
	FON+ R Aleat. 8-15-20 BV	10.20	0.50 L	0.58	0.60	D	AC14-26050500/20	0.60 L	0.60	0.60	C	AC14-26053711/3
	FON+ R Aleat. Plus 12-20-35 BV	9.80	0.40 LM	0.48	0.55	D	AC14-26050500/19	0.50 L	0.53	0.55	D	AC14-26053711/1
	FON+ Crystal 14 BV	14.00	0.60 L	0.59	0.60	C	AC18-26076829-D/57	0.60	0.61	0.60	C	AC18-26076829-D/62
	FON+ Tweed 14 BV	14.00	0.60	0.60	0.60	C	AC18-26076829-D/9	0.65	0.62	0.65	C	AC18-26076829-D/14
	FON+ Verde 11 BV	11.40	0.55	0.52	0.55	D	AC18-26076829-D/33	0.55	0.52	0.55	D	AC18-26076829-D/38

Board type	Model	% perforation	Plenum of 60 mm										
			Without mineral wool					With mineral wool					
			αw	αm	NRC	Class	Essay reference	αw	αm	NRC	Class	Wool thickness (mm)	Essay reference
Pladur® FON+ BA TAPERED EDGE thickness x width x length (mm)* 13x1200x2400	FON+ C 12/25 N.° 8 BA	16.00	0.60	0.72	0.65	C	AC14-26053711/53	0.70 L	0.78	0.80	C	45	AC14-26053711/57
	FON+ L 5 x 80 N.° 8 BA	10.70	0.45 LM	0.57	0.55	D	AC14-26053711/54	0.50 L	0.58	0.60	D	45	AC14-26053711/58
Pladur® FON+ BV V EDGE thickness x width x length (mm)* 13x1200x2400	FON+ R 8/18 BV	14.30	0.70	0.73	0.65	C	AC14-26053711/55	0.75	0.77	0.75	C	45	AC14-26053711/56
	FON+ Crystal 14 BV	14.00	0.65	0.62	0.60	C	AC18-26076829-D/56	0.65	0.65	0.65	C	20	AC18-26076829-D/59
	FON+ Tweed 14 BV	14.00	0.65	0.64	0.60	C	AC18-26076829-D/8	0.65	0.65	0.65	C	20	AC18-26076829-D/11
	FON+ Verde 11 BV	11.40	0.55	0.53	0.50	D	AC18-26076829-D/32	0.55 L	0.55	0.55	D	20	AC18-26076829-D/35

* To verify nominal dimension tolerances, consult product data sheets.

SUSPENDED CEILINGS

Technology
Pladur® AIR
Improves the quality of indoor air

Pladur® **FON+** suspended ceilings

The 600x600 tiles for Pladur® **FON+** Suspended Ceilings come with three different types of perforation: circular(R), square(C), and longitudinal(L). On the front there is an acoustic fleece that allows for better absorption and filters particles.

Pladur® **FON+** tiles for suspended ceilings have a special white paint finish and the Pladur® **FON+ DECOR** variety has a vinyl finish that comes in birch wood, oak, chestnut and also steel tones. The tile edges come in Straight Edge (A) or Tegular Edge (E) in both 24 mm or 15 mm profiles.

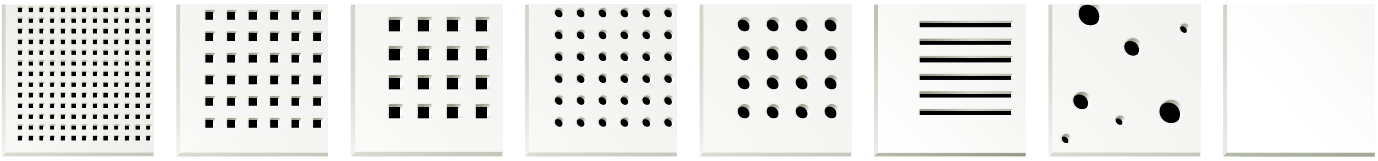
Pladur® **FON+** range is now endowed with Pladur® **AIR** technology to improve indoor air quality.

Application: Pladur® **FON+** improves auditory comfort in all areas where it is installed. Even though it is intended for public spaces such as hotels, cinemas, restaurants, cafeterias, event halls, shopping centres, etc., it is also suitable for common areas in a house (hallways, vestibule, entrances...).

Within the Pladur® **FON+** Suspended Ceilings range, you can choose from among more than 200 plasterboard models, adaptable to all kinds of projects.

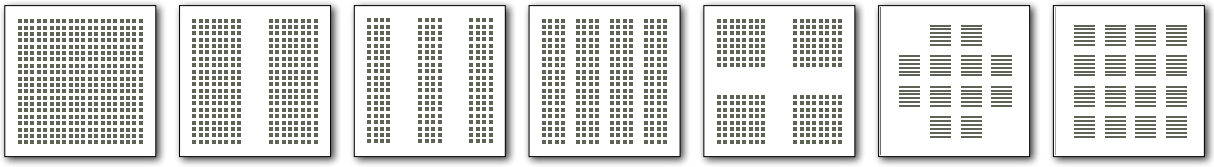
PERFORATION AND BLOCK DESIGNS

Type of Perforation:



C 3/8 Micro | C 8/18 | C 12/25 | R 8/18 | R 12/25 | L 5 x 80 | Aleat. 8-15-20 | Basic

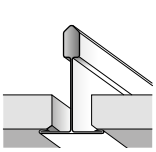
Block Design:



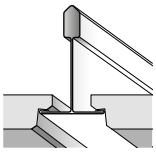
N.° 1 | N.° 2 | N.° 3 | N.° 4 L | N.° 4 C | N.° 12 | N.° 16

EDGE

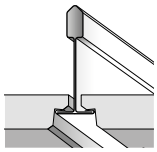
Finally, select the type of edge: straight or Tegular.



A Straight Edge



E 24 Tegular Edge24 mm



E 15 Tegular Edge 15 mm

Possible combinations:

C 3/8 Micro	C 8/18	C 12/25	R 8/18	R 12/25	L 5 x 80	Aleat. 8-15-20
N.° 1	N.° 1	N.° 1	N.° 1	N.° 1	N.° 12	N.° 1
N.° 2	N.° 3	N.° 2	N.° 3	N.° 2	N.° 16	N.° 3
N.° 3		N.° 3				
		N.° 4 L				
		N.° 4 C				

SURFACE FINISH

Available in high-quality white paint finish, ready for installation, or incorporating a fine sheet of vinyl for creating a finish in different types of wood or steel.

White paint | Chestnut vinyl | Oak vinyl | Birch vinyl | Steel vinyl

Note: Approximate DECOR vinyl colors.

TECHNICAL CHARACTERISTICS

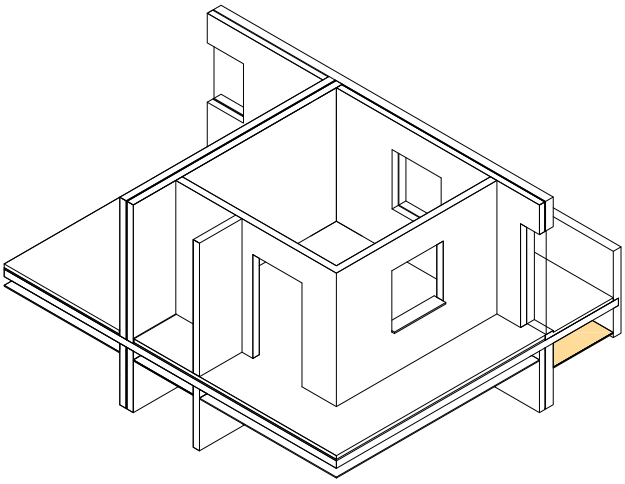
Board type	Model	% perforation	Plenum of 600 mm				
			With mineral wool of 80 mm				
			αw	αm	NRC	Class	Essay reference
Pladur® **FON⁺** **SUSPENDED** A Straight Edge E 24 Canto Edge 24 mm E 15 Canto Edge 15 mm thickness x width x length (mm)* 13x600x600	FON⁺ R 8/18 N.°1	11.20	0.60	0.62	0.60	C	CTA 353 /12/R
	FON⁺ L 5 x 80 N.° 16	10.90	0.50 L	0.53	0.55	D	CTA 352/12/R
	FON⁺ R Aleat. 8-15-20 N.° 1	8.10	0.50	0.52	0.55	D	CTA 349/12/R

Board type	Model	% perforation	Plenum of 200 mm									
			Without mineral wool					With mineral wool of 60 mm				
			αw	αm	NRC	Class	Essay reference	αw	αm	NRC	Class	Essay reference
Pladur® **FON⁺** **SUSPENDED** A Straight Edge E 24 Canto Edge 24 mm E 15 Canto Edge 15 mm thickness x width x length (mm)* 13x600x600	FON⁺ C 3/8 N.°1	10.20	0.50 LM	0.62	0.70	D	AC17-26069028/2	0.60 LM	0.75	0.80	C	AC17-26069028/1
	FON⁺ C 3/8 N.°2	8.70	0.40 LM	0.55	0.55	D	AC16-AC161017-2a	0.45 LM	0.58	0.60	D	AC16-AC161017-2b
	FON⁺ C 3/8 N.°3	7.30	0.35 LM	0.52	0.55	D	AC16-AC161017-3a	0.40 LM	0.53	0.60	D	AC16-AC161017-3b
	FON⁺ C 8/18 N.°1	14.30	0.65 L	0.68	0.70	C	AC14-26053711/37	0.75 L	0.75	0.75	C	AC14-26053711/44
	FON⁺ C 8/18 N.°3	12.20	0.60 L	0.63	0.65	C	AC15-26055261-22a	0.65 L	0.65	0.70	C	AC15-26055261-22b
	FON⁺ C 12/25 N.°1	16.40	0.65 L	0.70	0.70	C	AC14-26053711/40	0.75 L	0.75	0.80	C	AC14-26053711/41
	FON⁺ C 12/25 N.°2	13.10	0.55 L	0.62	0.65	D	AC14-26053711/39	0.65 L	0.67	0.70	C	AC14-26053711/42
	FON⁺ C 12/25 N.°3	9.80	0.40 LM	0.55	0.60	D	AC15-26055261-23a	0.55 L	0.60	0.65	D	AC15-26055261-23b
	FON⁺ C 12/25 N.°4 L	13.10	0.50 LM	0.62	0.60	D	AC15-26055261-24a	0.65 L	0.65	0.70	C	AC15-26055261-24b
	FON⁺ C 12/25 N.°4 C	10.50	0.50 L	0.57	0.60	D	AC14-26053711/35	0.55 L	0.57	0.60	D	AC14-26053711/45
	FON⁺ R 8/18 N.°1	11.20	0.55 L	0.62	0.65	D	AC14-26053711/34	0.65 L	0.68	0.70	C	AC14-26053711/46
	FON⁺ R 8/18 N.°3	9.60	0.50 L	0.57	0.60	D	AC15-26055261-26a	0.60 L	0.62	0.65	C	AC15-26055261-26b
	FON⁺ R 12/25 N.°1	10.40	0.55 L	0.57	0.60	D	AC14-26053711/38	0.55 L	0.58	0.60	D	AC14-26053711/43
	FON⁺ R 12/25 N.°2	6.90	0.40 LM	0.57	0.60	D	AC15-26055261-27a	0.45 L	0.57	0.60	D	AC15-26055261-27b
	FON⁺ L 5 x 80 N.° 12	8.20	0.35 LM	0.47	0.50	D	AC15-26055261-25a	0.45 L	0.50	0.55	D	AC15-26055261-25b
	FON⁺ L 5 x 80 N.° 16	10.90	0.45 LM	0.53	0.55	D	AC14-26053711/33	0.55 L	0.58	0.60	D	AC14-26053711/47
	FON⁺ R Aleat. 8-15-20 N.° 1	8.10	0.45 L	0.53	0.55	D	AC14-26053711/32	0.55	0.53	0.55	D	AC14-26053711/48
	FON⁺ R Aleat. 8-15-20 N.° 3	6.90	0.40 LM	0.53	0.55	D	AC15-26055261-28a	0.45 L	0.53	0.60	D	AC15-26055261-28b

Product thickness	Measurements (mm)*	Edge	Reaction to fire	Units per box	Units per pallet	Standard	Marked
Pladur® **FON⁺ TR** 13	600 x 600	A / E 24 / E 15	A2-s1, d0	6	192	EN 14190	CE/DAP/A+
Pladur® **FON⁺ DECOR** 13	600 x 600	A / E 24 / E 15	B-s1, d0	6	192	EN 14190	CE/DAP/A+

* To verify nominal dimension tolerances, consult product data sheets.

EXTERIOR CEILING

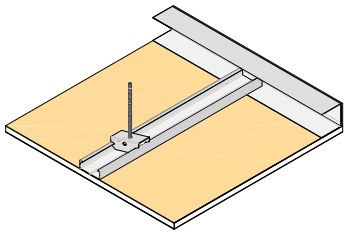


EXTERIOR CEILING

Pladur® **WAB** exterior ceilings are systems designed and tested for optimal performance in outdoor areas not directly exposed to bad weather, such as terraces, eaves, porches, and balconies.

These roofs **withstand high wind and moisture loads.**

- HIGH MECHANICAL RESISTANCE
- CERTIFIED QUALITY
- HIGH RESISTANCE TO HUMIDITY
- CORROSION PROTECTION UP TO 500H



SINGLE Z5 FRAME SUSPENDED

PLADUR® WAB EXTERIOR SUSPENDED CEILING

SYSTEM DEFINITION

Suspended ceiling consisting of a galvanised steel plate profile frame using Pladur® **T-45 Z5** profiles, suspended from the building structure using Pladur® **T-45 Z5** hanger brackets and Ø 6-mm threaded rods (M6 Z5) with a maximum plenum of 40 cm. The profiles are supported on Pladur® **C48/47 XL Z5** U-shaped Track mechanically attached around the whole perimeter each 400 mm. One Pladur® **WAB** boards is screwed to this frame.

FIELD OF APPLICATION

Concealed suspended ceilings designed and tested for optimal performance in outdoor areas not directly exposed to the weather such as their terraces, patios, porches and balconies.

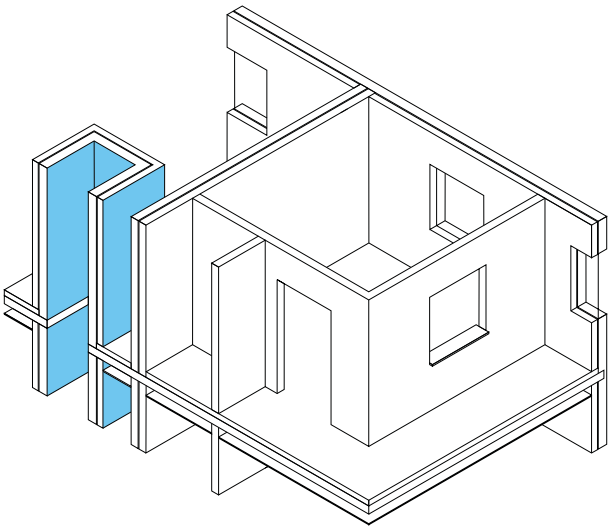
Frame distance (mm)	Plenum (mm)	Distance between attachment (m)																					
		Wind pressure (daN/m²)											Wind suction (daN/m²)										
		≤35	≤42	≤48	≤55	≤62	≤70	≤80	≤90	≤100	≤112	≤124	≤28	≤32	≤36	≤41	≤47	≤53	≤57	≤61	≤72	≤84	≤89
≤500	≤300	1.10	1.05	1.00	0.95	0.85	0.80	0.75	0.70	0.65	0.65	0.60	1.00	0.95	0.95	0.90	0.85	0.80	0.75	0.75	-	-	-
	≤400	1.15	1.05	0.85	0.70	0.60	0.55	0.45	0.40	0.35	0.30	0.25											
≤400	≤300	1.10	1.05	1.00	0.95	0.85	0.80	0.75	0.70	0.65	0.65	0.60	1.15	1.10	1.05	1.00	0.95	0.90	0.85	0.85	0.80	0.75	0.70
	≤400	1.20	1.15	1.10	0.90	0.80	0.65	0.55	0.50	0.45	0.40	0.35											
≤300	≤300	1.30	1.25	1.20	1.15	1.15	1.05	1.00	0.90	0.85	0.80	0.75	1.30	1.25	1.20	1.15	1.10	1.05	1.00	0.95	0.90	0.85	0.80
	≤400	1.30	1.25	1.20	1.15	1.05	0.90	0.75	0.65	0.60	0.50	0.45											

The hanger fasteners must withstand a minimum allowable tensile load of **44 kg** (as declared by the manufacturer), and the perimeter fasteners must withstand a minimum allowable shear load of **25 kg**.

It is the responsibility of a qualified technician to calculate the wind loads to which the ceiling will be subjected, applying the applicable regulations.

The limitations of the system and the criteria considered for its calculation and preliminary sizing are defined in the **Pladur®** documentation.

SPECIAL SYSTEMS



SPECIAL SYSTEMS

Partitions for special applications:

- **High-rise partitions** comprised of a twin stud frame braced by Pladur® board pieces and finished with screwed Pladur® boards on each side of the partition.

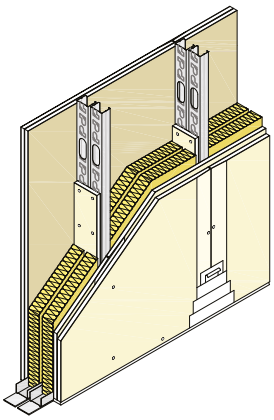
HIGH RISE

HIGH-RISE MECHANICAL

- **Pladur® Shaft wall systems,** rovide high-level fire protection to enclose lift or ventilation shaft walls, which are installed on just one side of the partition.

FIRE RESISTANCE

HIGH ACOUSTIC PERFORMANCE



HIGH RISE PARTITION

PLADUR® SMALL GAP HIGH RISE PARTITION

SYSTEM DEFINITION

Partition wall consisting of two **Pladur®** boards screwed on each side to a braced galvanised steel twin frame, with a minimum gap between them of 10 mm. Both frames are built from **Pladur®** studs (vertical elements) and **Pladur®** U-tracks (horizontal elements).

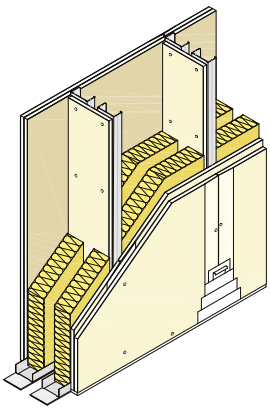
FIELD OF APPLICATION

Braced partition walls permitting high rising. Between building use units and common areas.

Profile	System	Boards	Surface mass (kg/m²)	Maximum height (m)				Thermal resistance m²K/W	Acoustic insulation (dBA)		Fire resistance(1)	
				600	400	600	400		R_A (dBA)	R_w (C,C_{tr}) (dB)	N HI I	F O
M 48-35 Pladur® stud	146 (48-35 + e + 48-35) 2 MW	4 x 12.5	44	4.85	5.35	5.75	6.35	2.81	58.7	60 (-1, -7)	EI 60	EI 120
	156 (48-35 + e + 48-35) 2 MW	4 x 15	50	4.85	5.35	5.75	6.35	2.85	56.6	58 (-1, -5)	EI 60	EI 120
	168 (48-35 + e + 48-35) 2 MW	4 x 18	64	5.40	5.95	6.40	7.10	2.89	54	56 (-2, -5)	EI 60	EI 120
M 70-35 Pladur® stud	190 (70-35 + e + 70-35) 2 MW	4 x 12.5	45	6.10	6.75	7.25	8.05	3.91	54	56 (-2, -7)	EI 60	EI 120
	200 (70-35 + e + 70-35) 2 MW	4 x 15	51	6.10	6.75	7.25	8.05	3.95	55	57 (-2, -4)	EI 60	EI 120
	212 (70-35 + e + 70-35) 2 MW	4 x 18	65	6.80	7.55	8.10	8.95	3.99	59.9	61 (-1, -2)	EI 60	EI 120
M 90 Pladur® stud	230 (90 + e + 90) 2 MW	4 x 12.5	47	7.35	8.10	8.70	9.65	5.01	53	55 (-2, -5)	EI 60	EI 120
	240 (90 + e + 90) 2 MW	4 x 15	53	7.35	8.10	8.70	9.65	5.05	55	57 (-2, -4)	EI 60	EI 120
	252 (90 + e + 90) 2 MW	4 x 18	67	8.15	9.05	9.70	10.75	5.09	55	57 (-2, -3)	EI 60	EI 120

(1) Fire resistance in **EI 60** systems is valid up to a maximum height of **6,0 m** in accordance with EN standard 15254-3.
Fire resistance in **EI 120** systems is valid up to a maximum height of **5,0 m** in accordance with EN standard 1364-1.

N Pladur® **N** board HI Pladur® **HI** board I Pladur® **I** board F Pladur® **F** board O Pladur® **OMNIA** board



HIGH RISE PARTITION

PLADUR® VARIABLE GAP HIGH RISE PARTITION

SYSTEM DEFINITION

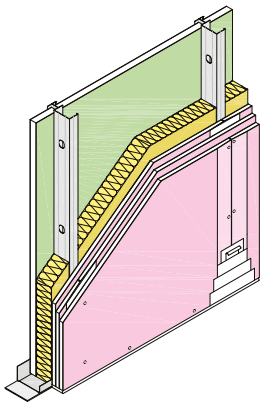
Partition wall consisting of two **Pladur®** boards screwed on each side to a braced galvanised steel twin frame, separated from each other by variable distance (minimum gap of 10 mm). Both frames are built from **Pladur®** studs (vertical elements) and **Pladur®** U-tracks (horizontal elements).

FIELD OF APPLICATION

Braced partition walls permitting high rising. Between building use units and common areas.

Profile	System	Thickness E = et + e (mm)	Space e (mm)	Boards	Surface mass (kg/m²)	Maximum height (m)				Acoustic insulation (dBA)		Fire resistance[1]	
						]		][		R_A (dBA)	R_W (C,C_{tr}) (dB)	N HI I	F O
						600	400	600	400				
M 48-35 Pladur® stud	146 (48-35 + e + 48-35) 2 MW	180 300	34 154	4 x 12.5	47	5.60 8.40	6.15 9.30	6.65 10.00	7.35 11.05	58.7	60 (-1, -7)	EI 60	EI 120
M 70-35 Pladur® stud	200 (70-35 + e + 70-35) 2 MW	240 300	40 100	4 x 15	55	6.85 8.25	7.60 9.10	8.15 9.80	9.00 10.85	55	57 (-2, -4)	EI 60	EI 120
M 90 Pladur® stud	240 (90 + e + 90) 2 MW	300	60	4 x 15	58	8.50	9.40	10.10	11.15	58	59 (-1, -3)	EI 60	EI 120

(1) Fire resistance in **EI 60** systems is valid up to a maximum height of **6,0 m** in accordance with EN standard 15254-3.
Fire resistance in **EI 120** systems is valid up to a maximum height of **5,0 m** in accordance with EN standard 1364-1.



SHAFTWALL PARTITION

PLADUR® SHAFTWALL PARTITION

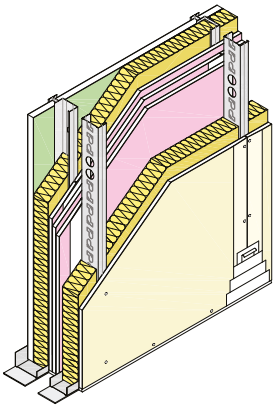
SYSTEM DEFINITION

Partition consisting of a frame made from 90-mm wide, 0.7-mm thick galvanised steel plate profiles. On the inaccessible side, a one side of the partition is created by fitting a 25-mm thick Pladur® **CH** board. Three or four 15-mm thick Pladur® **F** boards are screwed to the accessible side of the partition.

FIELD OF APPLICATION

Wall for all kinds of shafts, when high fire protection and/or acoustic insulation is required. It is specially designed to permit installation from just one side, thus eliminating the need for scaffolding.

System	Boards	Thickness E = et + e (mm)	Surface mass (kg/m²)	Maximum height (m)	Thermal resistance m²K/W	Acoustic insulation		Fire resistance
						R_A (dBA)	R_W (C, C_{tr}) (dB)	F O
Pladur® CH 135 RW	CH 25 + 3 x 15F	135	66	4.5	1.95	57.7	59 (-2, -7)	EI 120^{CH}
Pladur® CH 150 RW	CH 25 + 4 x 15F	150	78	4.5	2.03	57.7	59 (-2, -7)	EI 180^{CH}



SHAFTWALL PARTITION

PLADUR® SHAFTWALL PARTITION + STUDS WALL LINING

SYSTEM DEFINITION

Partition consisting of a frame made from 90-mm wide, 0.7-mm thick galvanised steel plate profiles. On the inaccessible side, a partition side is created by fitting a 25-mm thick Pladur® **CH** board. Three 15-mm thick Pladur® **F** boards, including joint treatment, are screwed to the accessible side of the partition. Next, on the accessible side, an independent wall lining is installed, leaving a minimum space of 10 mm between the frame and the partition.

FIELD OF APPLICATION

Wall for all kinds of shafts, when high fire protection and/or acoustic insulation is required, or when difficult access means the shafts must be installed from the outside only.

System	Boards	Thickness E = et + e (mm)	Space e (mm)	Surface mass (kg/m²)	Maximum height (m)(1)				Resistencia térmica m²K/W	Aislamiento acústico		Fire resistance
					]		][			R_A (dBA)	R_w(C, C_{tr}) (dB)	F O
					600	400	600	400				
Pladur® SHAFT WALL 135 RW + WALL LINING 63 (48-35) 2 MW	CH 25 + 3 x 15 F + 1x15	206	10	82	2.15	2.35	2.55	2.80	3.35	59.4	60 (-1,-6)	EI 120^{CH}
Pladur® SHAFT WALL 135 RW + WALL LINING 85 (70-35) MW	CH 25 + 3 x 15 F + 1x15	230	10	83	2.70	3.00	3.20	3.55	3.90	62.2	64 (-3,-9)	EI 120^{CH}
Pladur® SHAFT WALL 135 RW + WALL LINING 105 (90) MW	CH 25 + 3 x 15 F + 1x15	250	10	84	3.25	3.60	3.90	4.30	4.55	62.2	64 (-3,-9)	EI 120^{CH}

(1) Maximum height limited by the height of the wall lining without bracing
(2) Value obtained considering a base Pladur® shaft wall partition 120 MW

TECHNICAL NOTES AND CONSIDERATIONS

MECHANICAL RESISTANCE:
For the group of '**Pladur®** high-rise partition' systems, the total thickness of the finished partition wall may vary with technical requirements. For other partition thicknesses, consult Technical Support.

The surface mass indicated in the tables is based on systems with Pladur® **N** boards.

eT: Total thickness of the finished partition.

FIRE RESISTANCE:
Please, pay attention to test certificate execution condition.

S/E: Classification untested

(Shaft wall) Test valid up to a maximum height of 4.5 m and permits a board horizontal joint.

For systems with shaft wall partitions, including rock wool, the density is 70 kg/m³ and thickness 60 mm, in accordance with the tests performed.

Wall lining, partition wall and ceiling systems with Pladur® **OMNIA** boards can assume the same fire resistance classification as the Pladur® **F** board performance test. The results may be extrapolated if indicated in the building code norm and in accordance with the extension report.

THERMAL INSULATION:
MW: Mineral wool (both glass wool and rock wool) with a U-value of λ = 0,036 W/mK and variable thickness, required to fill the profile core.

RW: Rock wool

F Pladur® **F** board O Pladur® **OMNIA** board

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Central Offices and Factory in Valdemoro-Madrid. Plasterboards, Profiles and Compounds.

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