

# LATTONEDIL SANDWICH PANELS FIRE AND SOUND PERFORMANCE

REVISED ON JULY 25, 2017 – REV. 6

MILANO  
**lattonedil**  
INSULATES AND PROTECTS OVER TIME

# LATTONEDIL SANDWICH PANELS WITH POLYURETHANE INSULATION CORE FIRE AND SOUND PERFORMANCE

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## FIRE PERFORMANCE CLASSIFICATION

MINERAL WOOL PANEL	THICKNESS MM	FIRE REACTION	FIRE RESISTANCE			
			30'	60'	90'	120'
EUROFIRE REI Steel 0,5 + Steel 0,5	50	A2-s1,d0	REI 30			
	60	A2-s1,d0	REI 30			
	80	A2-s1,d0	REI 90			
	100	A2-s1,d0	REI 120			
	120	A2-s1,d0	REI 120			
	150	A2-s1,d0	REI 120			
	170*	A2-s1,d0	REI 90			
* ( DISTANCE BETWEEN SUPPORTS 3.3 ml )	180	A2-s1,d0	REI 240			
	200	A2-s1,d0	REI 240			
EUROFIRE SOUND REI Steel 0,5 + Steel 0,6	50	A2-s1,d0				
	60	A2-s1,d0				
	80	A2-s1,d0				
	100	A2-s1,d0	REI 90			
	120	A2-s1,d0	REI 90			
	150	A2-s1,d0	REI 90			
	180	A2-s1,d0	REI 90			
200	A2-s1,d0	REI 90				
ISOPARFIRE EI Steel 0,5 + Steel 0,5	50	A2-s1,d0	EI 30			
	60	A2-s1,d0	EI 30			
	80	A2-s1,d0	EI 60			
	100	A2-s1,d0	EI 90 EI 120			
	120	A2-s1,d0	EI 120			
	150	A2-s1,d0	EI 180			
	180	A2-s1,d0	EI 180			
200	A2-s1,d0	EI 180				
ISOPARFIRE REI Steel 0,5 + Steel 0,5	100	A2-s1,d0	REI 30			
ISOPARFIRE EI SOUND Steel 0,5 + Steel 0,6	50	A2-s1,d0	EI 30			
	60	A2-s1,d0	EI 30			
	80	A2-s1,d0	EI 60			
	100	A2-s1,d0	EI 90 EI 120			
	120	A2-s1,d0	EI 120			
	150	A2-s1,d0	EI 120			
	180	A2-s1,d0	EI 120			
200	A2-s1,d0	EI 120				
ISOPARFIRE EI ELEGANT Steel 0,5 + Steel 0,5	120	A2-s1,d0	EI 120			
ISOPARFIRE EI ELEGANT Steel 0,6 + Steel 0,6	80	A2-s1,d0	EI 15			
SOPARFIRE ELEGANT SOUND Steel 0,5 + Steel 0,6	40	A2-s1,d0				
	50	A2-s1,d0				
	60	A2-s1,d0				
	80	A2-s1,d0				
	100	A2-s1,d0				
	120	A2-s1,d0				
	150	A2-s1,d0				
180	A2-s1,d0					
200	A2-s1,d0					



# LATTONEDIL SANDWICH PANELS WITH POLYURETHANE INSULATION CORE FIRE AND SOUND PERFORMANCE

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## FIRE PERFORMANCE CLASSIFICATION

MINERAL WOOL PANEL	THICKNESS MM	FIRE REACTION	FIRE RESISTANCE			
			30'	60'	90'	120'
EUROFIRE DECK REI Steel 0,5 + Steel 0,5	170	A2-s1,d0	REI 120			
GIANO Steel 0,5 + Steel 0,5	103	A2-s1,d0	EI 30			
ISOPARFIRE EI PLUS Steel 0,9 + Steel 0,9 ± 50% Single span up to 10.000 mm	150 (10.88 m) 150 (12 m)	A2-s1,d0 A2-s1,d0	EI 120 EI 90			



## SOUND PROPERTIES

MINERAL WOOL PANEL	THICKNESS MM	SOUND INSULATION	SOUND ABSORPTION
EUROFIRE SOUND REI Steel 0,5 + Steel 0,6	50	R <sub>w</sub> = 31 dB	α <sub>w</sub> = 0,90
	80	R <sub>w</sub> = 34 dB	α <sub>w</sub> = 0,95
	100	R <sub>w</sub> = 35 dB	α <sub>w</sub> = 0,95
ISOPARFIRE EI SOUND Steel 0,5 + Steel 0,6	50	R <sub>w</sub> = 31 dB	α <sub>w</sub> = 0,90
	80	R <sub>w</sub> = 34 dB	α <sub>w</sub> = 0,95
	100	R <sub>w</sub> = 35 dB	α <sub>w</sub> = 0,95
ISOPARFIRE ELEGANT SOUND Steel 0,5 + Steel 0,6	50	R <sub>w</sub> = 31 dB	α <sub>w</sub> = 0,90
	80	R <sub>w</sub> = 34 dB	α <sub>w</sub> = 0,95
	100	R <sub>w</sub> = 35 dB	α <sub>w</sub> = 0,95



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## FIRE PERFORMANCE CLASSIFICATION

PANEL	GLASS FIBER THICKNESS MM	FIRE REACTION	FIRE RESISTANCE
EUROFIRE GLASS Steel 0,5 + Steel 0,5	50	A2-s1,d0	
	60	A2-s1,d0	
	80	A2-s1,d0	
	100	A2-s1,d0	
	120	A2-s1,d0	
	150	A2-s1,d0	
EUROFIRE GLASS SOUND Steel 0,5 + Steel 0,6	50	A2-s1,d0	
	60	A2-s1,d0	
	80	A2-s1,d0	
	100	A2-s1,d0	
	120	A2-s1,d0	
	150	A2-s1,d0	
ISOPARFIRE GLASS Steel 0,5 + Steel 0,5	50	A2-s1,d0	
	60	A2-s1,d0	
	80	A2-s1,d0	
	100	A2-s1,d0	
	120	A2-s1,d0	
	150	A2-s1,d0	
ISOPARFIRE GLASS SOUND Steel 0,5 + Steel 0,6	50	A2-s1,d0	
	60	A2-s1,d0	
	80	A2-s1,d0	
	100	A2-s1,d0	
	120	A2-s1,d0	
	150	A2-s1,d0	
ISOPARFIRE GLASS ELEGANT Steel 0,5 + Steel 0,5	40	A2-s1,d0	
	50	A2-s1,d0	
	60	A2-s1,d0	
	80	A2-s1,d0	
	100	A2-s1,d0	
	120	A2-s1,d0	
	150	A2-s1,d0	
ISOPARFIRE GLASS ELEGANT SOUND Steel 0,5 + Steel 0,6	40	A2-s1,d0	
	50	A2-s1,d0	
	60	A2-s1,d0	
	80	A2-s1,d0	
	100	A2-s1,d0	
	120	A2-s1,d0	
	150	A2-s1,d0	



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## SOUND PROPERTIES

PANEL	GLASS FIBER THICKNESS MM	SOUND INSULATION	SOUND ABSORPTION
EUROFIRE GLASS SOUND Steel 0,5 + Steel 0,6	50	$R_w = 31$ dB	$\alpha_w = 0,90$
	80	$R_w = 34$ dB	$\alpha_w = 0,95$
	100	$R_w = 35$ dB	$\alpha_w = 0,95$
ISOPARFIRE GLASS SOUND Steel 0,5 + Steel 0,6	50	$R_w = 31$ dB	$\alpha_w = 0,90$
	80	$R_w = 34$ dB	$\alpha_w = 0,95$
	100	$R_w = 35$ dB	$\alpha_w = 0,95$
ISOPARFIRE GLASS ELEGANT SOUND Steel 0,5 + Steel 0,6	50	$R_w = 31$ dB	$\alpha_w = 0,90$
	80	$R_w = 34$ dB	$\alpha_w = 0,95$
	100	$R_w = 35$ dB	$\alpha_w = 0,95$



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## FIRE PERFORMANCE CLASSIFICATION

POLYISOCYANURATE PANEL	THICKNESS MM	FIRE REACTION	FIRE RESISTANCE					
			15'	30'	60'	90'	120'	180'
EUROCINQUE HP Steel 0,4 + Steel 0,4	30	B-S2,d0						
	40 TO 200	B-S1,d0						
SOLARPANPLUS HP Steel 0,5 + Steel 0,4	FROM 30 TO 200	B-S2,d0						
ISOPAR HP Steel 0,4 + Steel 0,4	30	B-S2,d0						
	DA 40 A 200	B-S1,d0						
ISOPAR ELEGANT HP Steel 0,4 + Steel 0,4	FROM 40 TO 200	B-S2,d0						
EUROCINQUE REI Steel 0,4 + Steel 0,4	100	B-S1,d0		REI 30				
EUROCINQUE REI Steel 0,6 + Steel 0,6	50	B-S1,d0		REI 15				
EUROCINQUE HP Alu 0,6 + Steel 0,4	FROM 30 TO 120	B-S1,d0						
ISOPAR EI Steel 0,5 + Steel 0,5	60	B-S1,d0		EI 15				
	100	B-S1,d0		EI 30				



## FIRE PERFORMANCE CLASSIFICATION

POLYURETHANE B2 PANEL	THICKNESS MM	FIRE REACTION	FIRE RESISTANCE				
			30'	60'	90'	120'	180'
EUROCOPRE B2 Steel 0,4 + Steel 0,4	30						
	40	C-S3,d0					
	50						
	60						
	80						
ISOCOPRE B2 Steel 0,4 + Steel 0,4	30	-					
	40	B-S3,d0					
	50	C-S3,d0					
	60	B-S3,d0					
	80	C-S3,d0					
SOLARPANPLUS B2 Steel 0,5 + Steel 0,4	30	C-S3,d0					
	40	C-S3,d0					
	50	C-S3,d0					
	60	C-S3,d0					
	80	D-S3,d0					
ISOPAR B2 Steel 0,4 + Steel 0,4	100	D-S3,d0					
	120	D-S3,d0					
	FROM 30 TO 200	B-S2,d0					



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## FIRE PERFORMANCE CLASSIFICATION

POLYURETHANE PANEL	THICKNESS MM	FIRE REACTION	FIRE RESISTANCE				
			30'	60'	90'	120'	180'
ALL LATTONEDIL PRODUCTS		F (According to EN-13501/1)					



## SOUND PROPERTIES

POLYURETHANE PANEL	THICKNESS MM	SOUND INSULATION	SOUND ABSORPTION



## SANDWICH PANELS WITH POLYURETHANE INSULATION CORE (B ROOF) FIRE PERFORMANCE (FROM OUTSIDE TO INSIDE)

PANEL	THICKNESS MM	B ROOF
EUROCINQUE Steel + Steel	FROM 30 TO 150	Roof T2-T3
EUROCINQUE All + Steel	30	Roof T2-T3
	FROM 40 TO 80	Roof T3
	100	Roof T2-T3
ISOCOPRE Steel + Steel	30 - 40	Roof T3
	50	Roof T2-T3
	60 - 80	Roof T3
	100	Roof T2-T3
ISOCOPRE All + Steel	FROM 30 TO 100	Roof T2-T3
SOLARPAN PLUS Steel + Steel	FROM 30 TO 120	Roof T2-T3
SOLARPAN PLUS All + Steel	FROM 30 TO 120	Roof T2-T3
ISOCURVO 2 Steel + Steel	FROM 40 TO 80	Roof T3
EURODUE ENERGY Steel + Steel	100	Roof T3





Certified company:  
UNI EN ISO 9001:2008  
certificate n° 4674

/lattedil

Lattedil s.p.a. Milano  
Manufacturer of sandwich panels for roof and façade  
Via degli Artigiani, 14 - 22060 Carimate | Co | Italy  
Tel. +39 031 791377 - Fax +39 031 791690  
[www.lattedil.it](http://www.lattedil.it) - [info@lattedil.it](mailto:info@lattedil.it)

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