



RADICSOL
WHERE YOUR HOME BEGINS

RADICSOL SYSTEM

The complete system
to fixing the ground
walls of wooden houses
on slab foundation



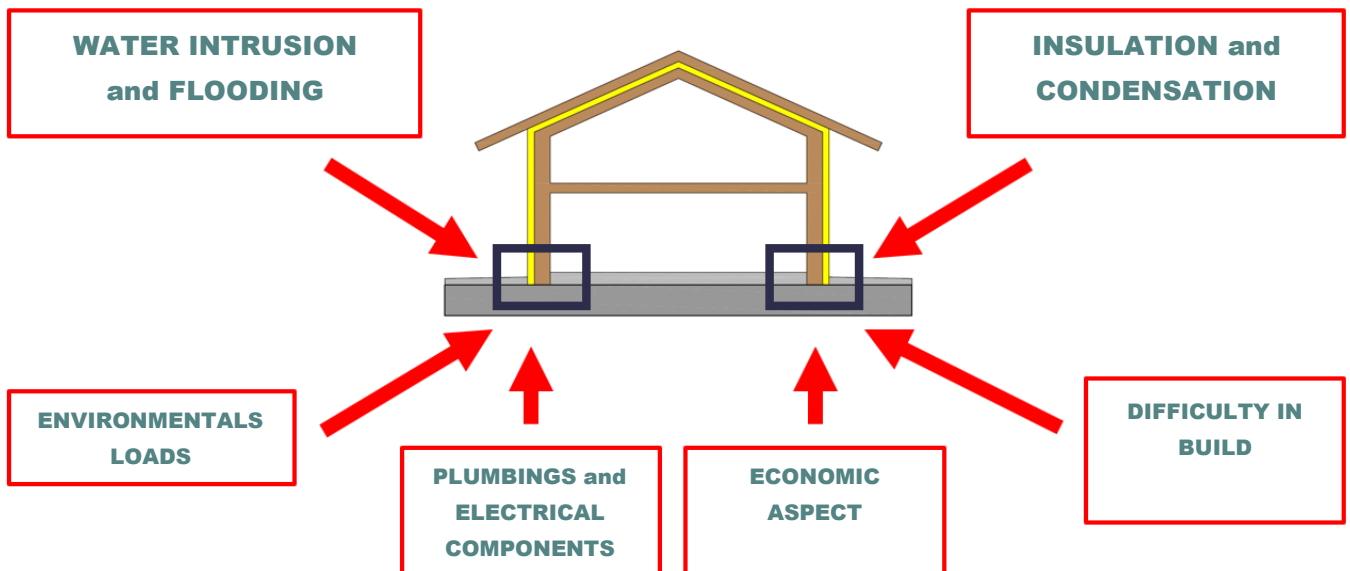
www.radicsol.it

SUMMARY

WHY A CORRECT CONNECTION ON SLAB IS VERY IMPORTANT?	p.01
- different types of walls connection on slab foundation	P.02
RADICSOL ENSURE THE BEST PERFORMANCE AND DURABILITY	p.04
RADICSOL System	P.04
- Components	P.05
RADICSOL System advantages	p.07
- INSULATION and DURABILITY tested by TBZ and FRAUNHOFER	p.07
- INCREASED WIND AND EARTHQUAKES SAFETY	p.12
- RADICSOL Structural Calculation Software	p.14
- FAST AND SIMPLE TO INSTALL	p.15
- SIMPLIFICATION of construction phases	p.18
- SYSTEM VERSATILE	p.20
- SECTION TYPES	p.22
- DIMENSIONS	p.27
- GALLERY	p.28

WHY A CORRECT CONNECTION ON SLAB IS VERY IMPORTANT?

The walls ground connection always represents the point of greatest complexity in all buildings, because this node is characterized by a multiplicity of aspects of different nature that must be addressed all together in the correct way without neglecting anyone:



The most frequent problem encountered in wooden constructions is certainly moisture damage such as wood rot and mold, at the connection to ground of the walls.

This is unfortunately a widespread problem that occurs a few years after construction, which irreversibly damages the structure. Foundation problems can be some of the most difficult and costly problems to repair.

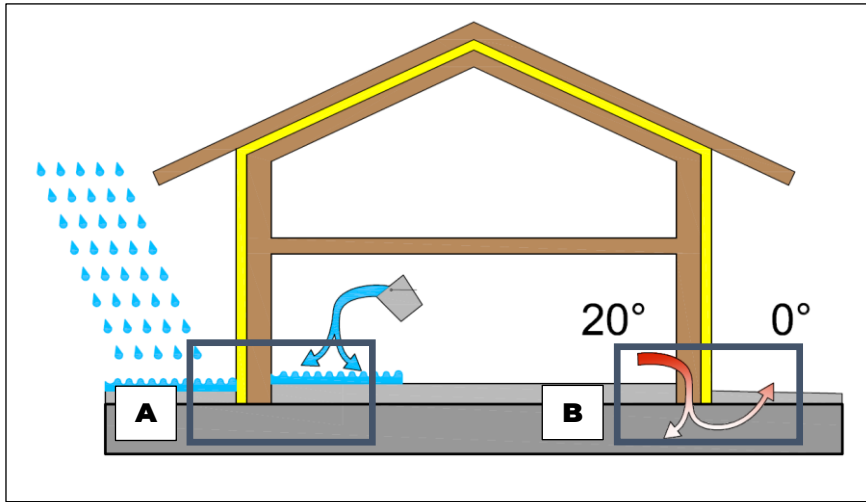
The main causes are mainly two:

A - WASHOUT, SPLASHING AND FLOODING OUTSIDE OR INSIDE THE HOME The wall foot outside is very often subjected to washout by heavy rain, splashes or flooding from intense showers, while inside possible breakage of water systems, accidental flooding but also simple floor washing operations, can create inadequate humidity conditions for walls durability, in particular when water accumulates in "traps" consisting of incorrect geometric configurations of the knot and/or waterproofing sheaths.

B - INTERNAL CONDENSATION

The water vapor, which in winter passes through the building envelope, and therefore also the walls, due to the higher internal temperature, finding a cold layer along its path (DEW POINT) near the ground support, can condense thus passing to the liquid state and thus creating "humidity" that in a short time damages the walls themselves. This condition can also occur inside the sheaths precisely because they represent an obstacle to the passage of steam.

The wrong ground connection can create problems of infiltration and heat loss, creating condensation and humidity, which decrease comfort and in a short time cause irreversible damage to the structure. Waterproofing membranes at the walls foot are not sufficient to solve the problem, and indeed often cause or amplify it



INTERNAL FLOODING DAMAGE



Foto: <http://www.woodlab.info> – courtesy of Ing. Alex Merotto

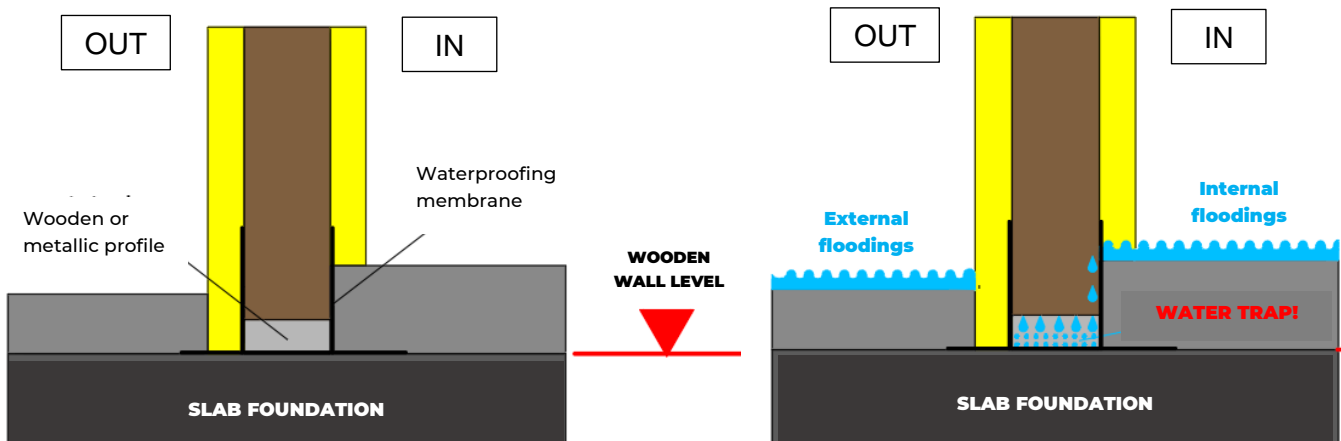
INTERSTITIAL CONDENSATION DAMAGE



DIFFERENT TYPES OF WALLS CONNECTION ON SLAB FOUNDATION

The ground connection of a wooden structure can be performed in several ways, including:

WALL PLACED DIRECTLY ON SLAB FOUNDATION LEVEL protected by external and internal waterproofing membranes (with leveling element, wooden or metallic, or without) – **WATER TRAP** – high probability of infiltration and stagnation by internal or external flooding through the membranes (with sealing problems caused by irregularities brackets and / or installation of technological systems) and interstitial condensation to the support amplified by the high thermal conduction of the metal if present:

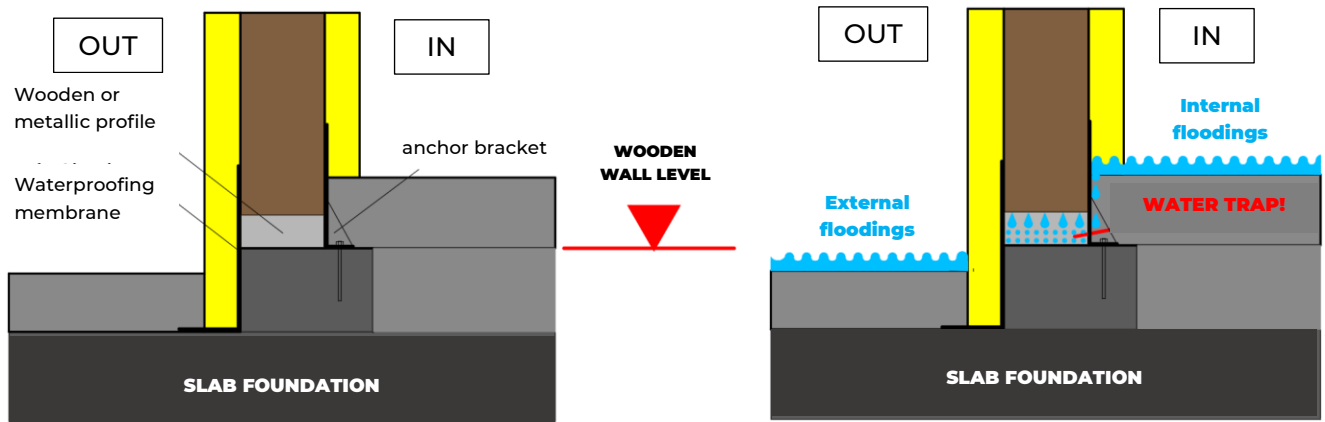


WALL AT SLAB FOUNDATION LEVEL



STAGNATION AND CONDENSATION

WALL PLACED ON RAISED CURB protected by external (and, eventually, internal) waterproof membranes (with leveling element, wooden or metallic, or without) – **WATER TRAP** – high probability of infiltration and stagnation by internal flooding through the membranes (with sealing problems caused by irregularities brackets and / or installation of technological systems) and you must always check the thermo-hygrometric conditions at the wall support to avoid interstitial condensation:

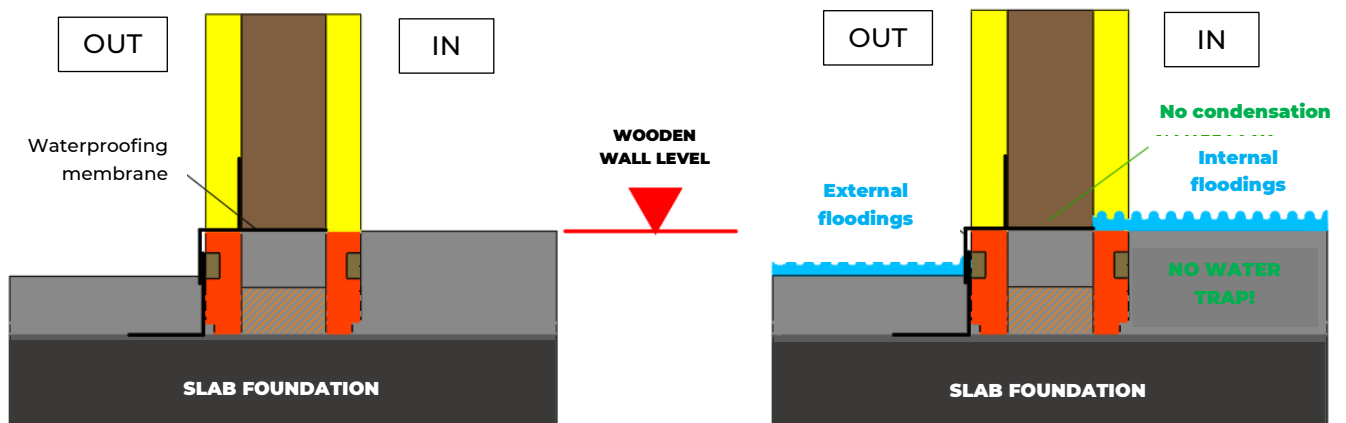


WALL PLACED ON RAISED CURB



STAGNATION PROBLEMS and condensation to be verified

WALL PLACED ON RADICSOL optionally protected only by external waterproof membrane - leveling element no needed - the curb is PERFECTLY FLAT - **NO WATER TRAP** - you are safe from any problems of infiltration from flooding and stagnation both external and internal - OPTIMAL THERMOHYGROMETRIC CONDITIONS - NO interstitial condensation and durability guaranteed over the years.



WALL ON RADICSOL



**NO WATER TRAP
NO CONDENSATION
NO LEVELLING PROFILE**

AND MORE:

- EXCELLENT STATIC PERFORMANCE TO ENVIRONMENTAL LOADS, such as wind and earthquakes
- EASY TO INSTALL

RADICSOL GUARANTEES THE CORRECT CONNECTION TO SLAB FOUNDATION

Thanks to important studies and tests carried out, RADICSOL is the only COMPLETE SYSTEM for slab attachment TESTED AND CERTIFIED in every aspect. In particular, the system can boast the important collaborations of the following Institutes and Professionals, whose documentation is available at the download area of the site www.radicsol.it/download :



2D AND 3D ENERGY CERTIFICATION

Studies on linear thermal bridge and dew temperature in different climate zones
 – by Gunther Gantioler



Hygrothermal evaluation of a wooden wall foundation with the innovative product “SYSTEM RADICSOL”

Fraunhofer Institute for Building Physics I

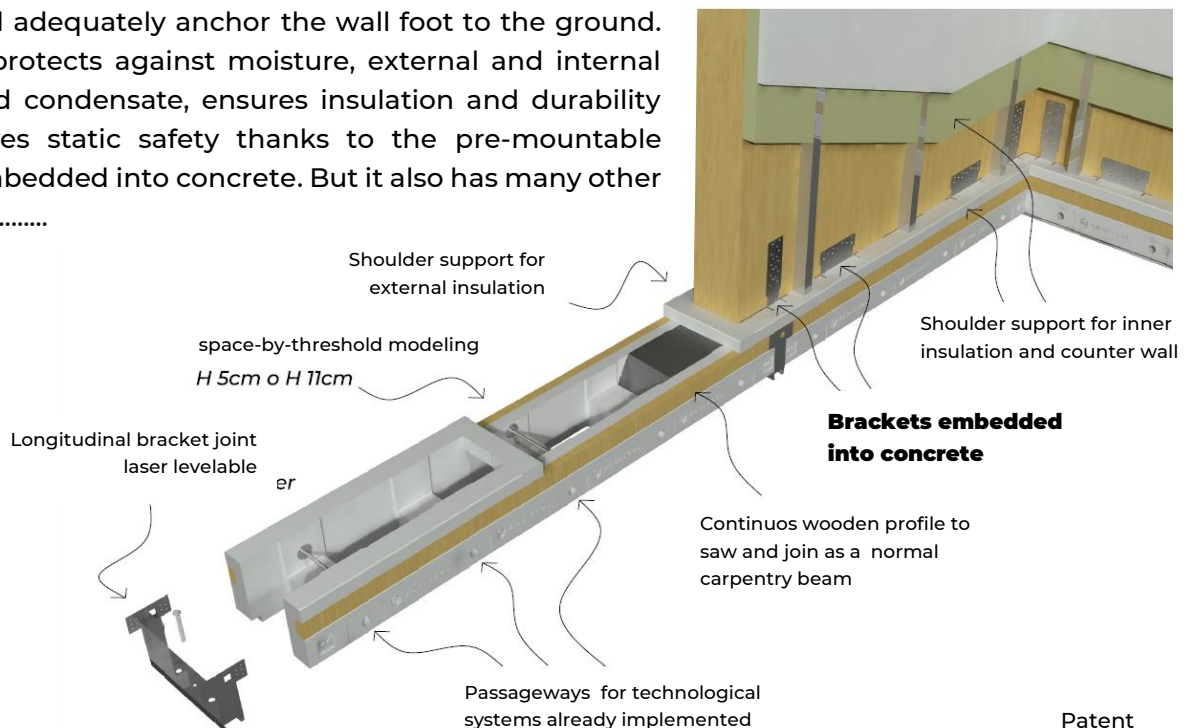


EXPERIMENTAL VERIFICATION OF THE MECHANICAL BEHAVIOR OF THE RADICSOL ROOT BEAM SYSTEM WITH BRACKETS INTEGRATED IN THE JET –
 by Prof. Ing. Francesco Clementi

RADICSOL STRUCTURAL CALCULATION SOFTWARE – in dissipative and non-dissipative conditions, with experimental validation of the results - by Ing. Davide Cicchini

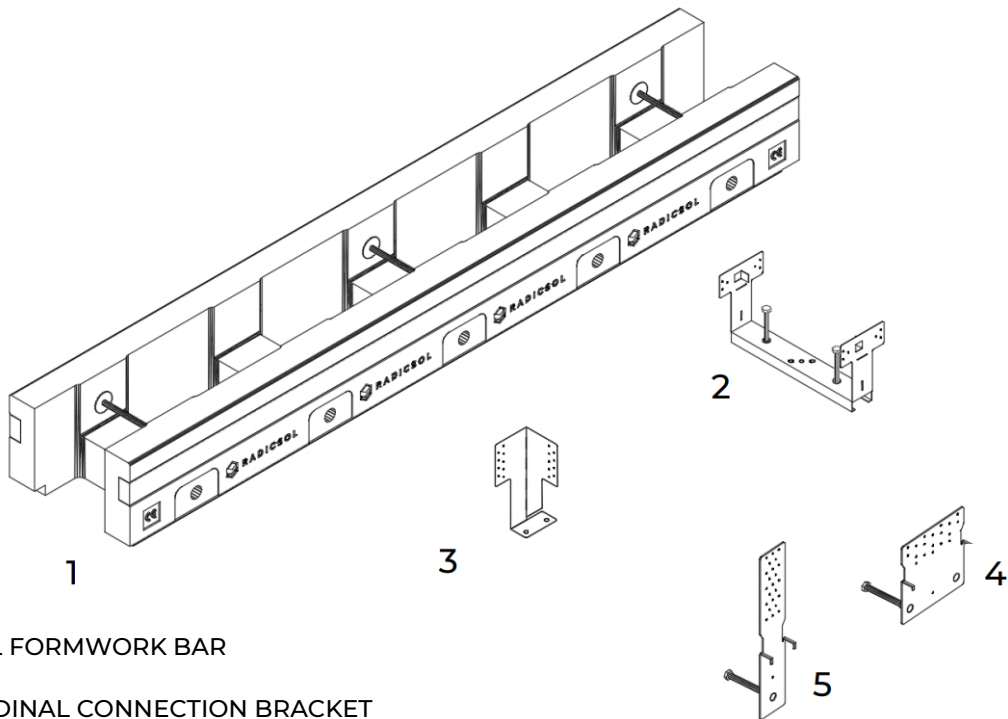
RADICSOL SYSTEM PATENT

RADICSOL is a patented system to correctly carry out the ground attachment in wooden buildings that allows to raise, insulate and adequately anchor the wall foot to the ground. RADICSOL protects against moisture, external and internal flooding and condensate, ensures insulation and durability and improves static safety thanks to the pre-mountable brackets embedded into concrete. But it also has many other advantages.....



RADICSOL SYSTEM COMPONENTS

The RADICSOL System consists of only three elements that allow you to create any planimetric geometry and any construction node, and two structural brackets that can be integrated into the concrete casting:



1 - RADICSOL FORMWORK BAR

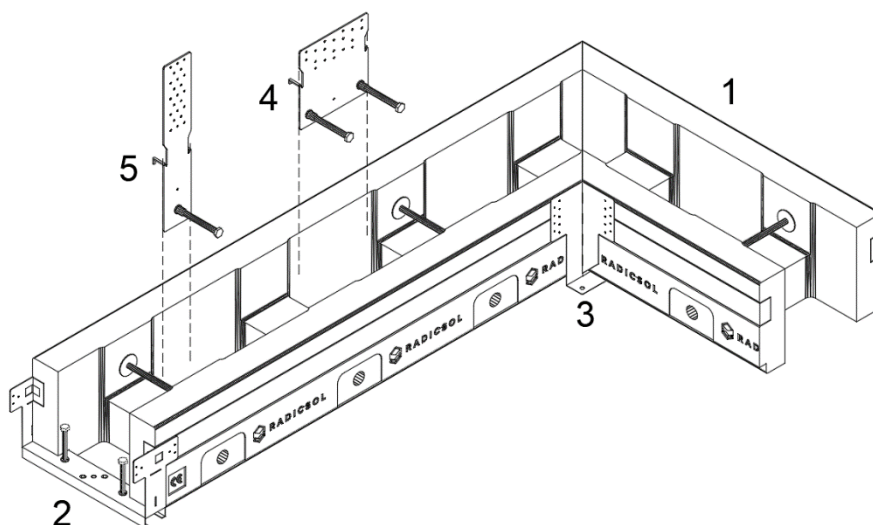
2 - LONGITUDINAL CONNECTION BRACKET

3 - CORNER CONNECTION BRACKET

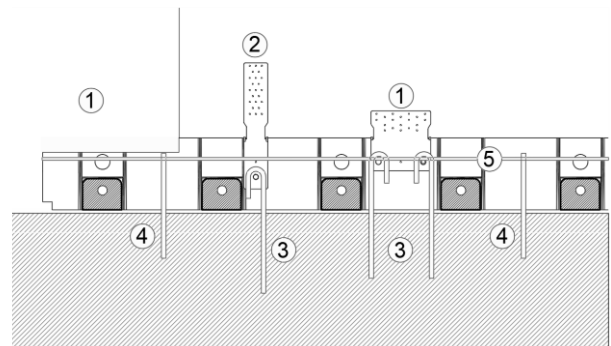
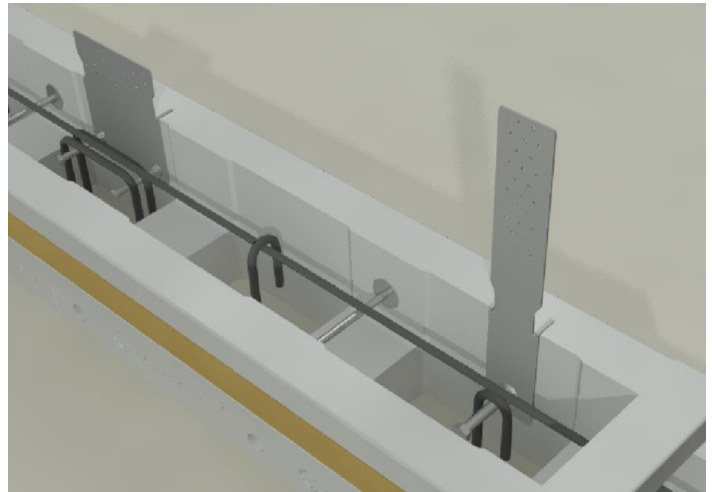
4 - PRE-MOUNTABLE SHEAR CONNECTION BRACKET SLP20

5 - PRE-MOUNTABLE LIFTING CONNECTION BRACKET HD50

With simple carpenter operations, RADICSOL formwork bars can be cut at any angle like a wooden root beam, and jointed thanks to the connection brackets. Thanks to the high precision that the system allows, structural brackets can be fixed on the formwork edge and integrated into concrete casting with great capacity advantages compared to traditional post-mounted brackets:



RADICSOL PRE-MOUNTABLE BRACKETS (see technical sheet in the "download" area of the www.radicsol.it/download website) armed with POST-INSTALLED rebars, avoid vertical splitting of the concrete of the curb and give excellent static performance:



- 1 - pre-mountable shear bracket SLP20
- 2 - pre-mountable lifting bracket HD50
- 3 - rebars for vertical actions
- 4 - rebars for shear loads
- 5 - shear load splitter rebar (or FRC concrete)



THE ADVANTAGES OF RADICSOL SYSTEM



INSULATION AND DURABILITY
tested by TBZ and FRAUNHOFER



INCREASED SEISMIC SAFETY tested
by laboratory tests



Simplicity and speed
of installation



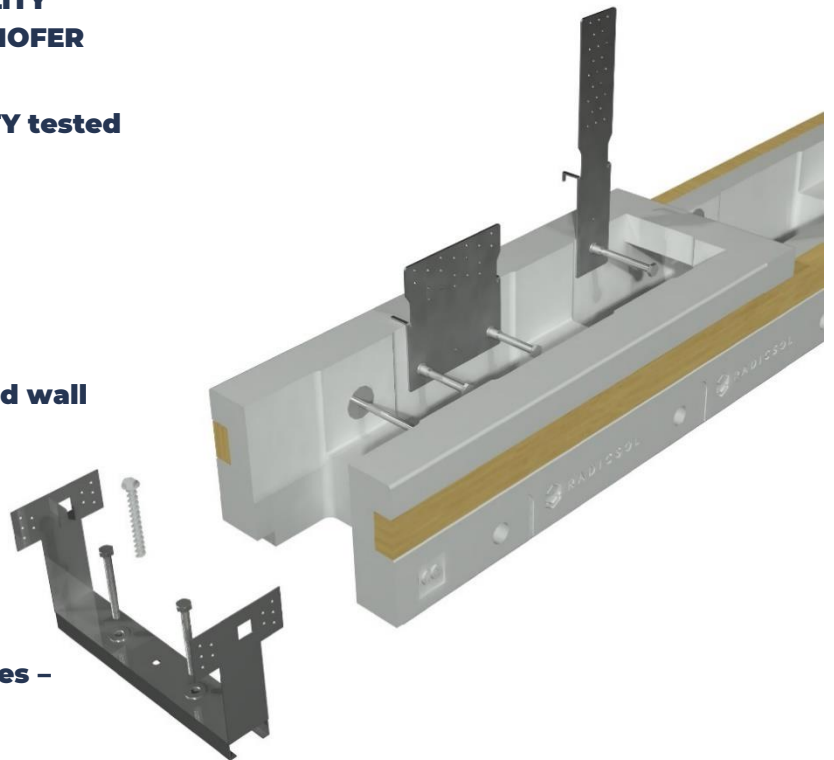
Precision of alignments and wall
support planes



Economy and
rationalization of the
construction site

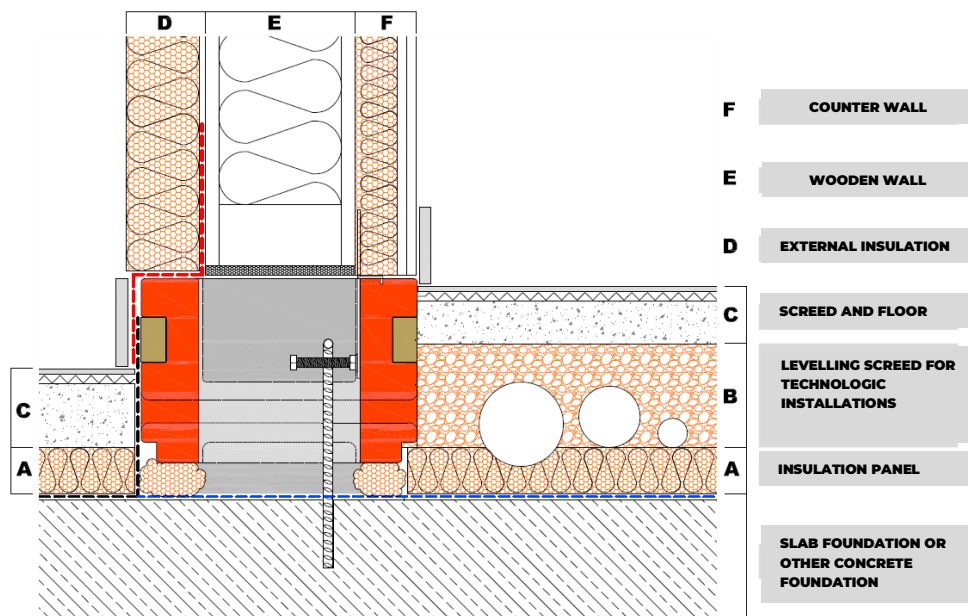


Multiplicity of possible types -
xlam - frame - straw



INSULATION AND DURABILITY tested by TBZ and FRAUNHOFER.

Thanks to the continuity between the insulation of the floor and the walls guaranteed by the particular geometry of Radicsol, the resolution of the linear thermal bridge and the ideal thermo-hygrometric conditions for the support are obtained, which ensure the durability of the wooden wall



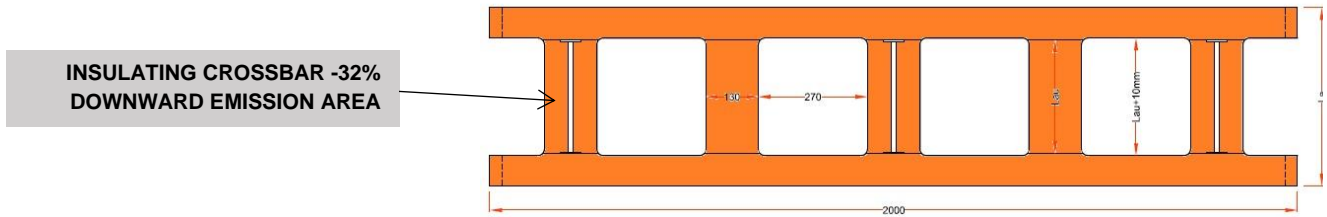
RADICSOL with INTERNAL WIRE FIXING (see chap. " System versatility ")

The system, on the outer shoulder, allows to support insulation and coating panels or finishing shaving, while on the inner shoulder allows to support the counter wall and allows to have a continuous insulation from the floor to the wall.

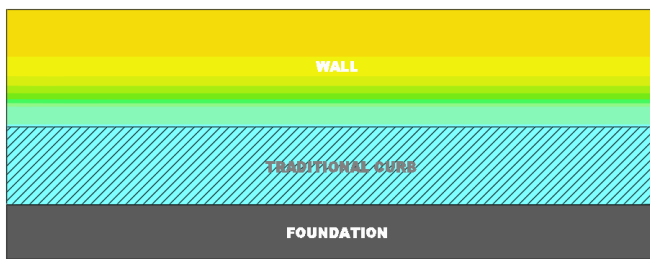
Wall elevation quota allows to accommodate the necessary ground insulation, technologic installations and floor, without exceeding wall level.

THERMAL BRIDGE AND MINIMUM TEMPERATURE Tsi

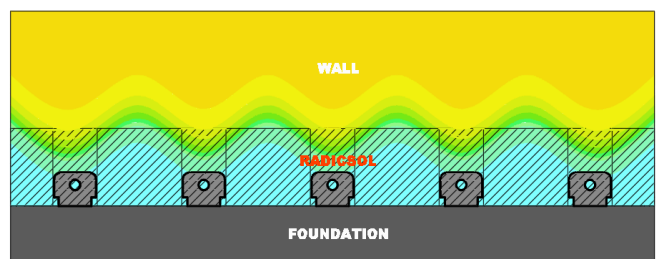
The particular shape of RADICSOL, thanks to its insulating crossbars that limit the area of contact with the foundation by more than 30%, allows to significantly reduce the downward emission of heat so increasing temperature at the wall support: in this way the points of possible condensation in wall foot are eliminated:



by comparing the trend of the isotherms in a longitudinal section between a traditional curb and the **RADICSOL curb**, it can be seen how the insulating crossbars increase the average temperature at the support of the wooden wall:

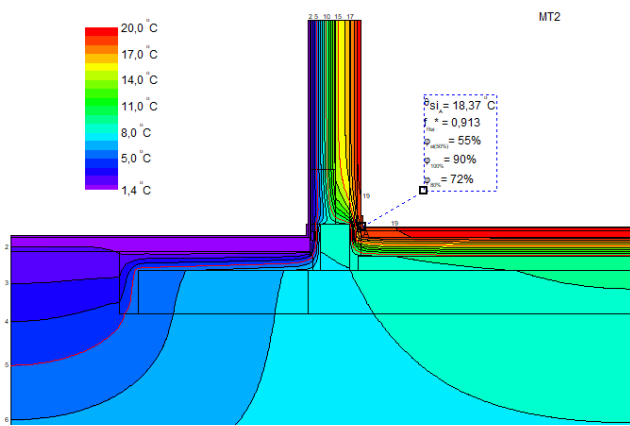


TRADITIONAL CURB

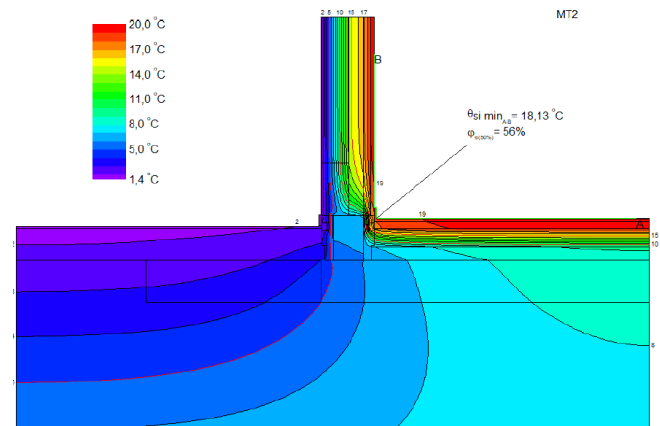


RADICSOL CURB

These characteristics mean that even in absence of external extension of the horizontal or vertical insulation RADICSOL allows to guarantee excellent values for **Tsi-min** and **PSI** that **prevent the formation of mold inside and ensure energy savings**:



RADICSOL 140 with CLT 100mm ZONE E – VERONA - Italy (TBZ)



RADICSOL 140 with CLT 100mm ZONE E – VERONA - Italy (TBZ)

BUILDING energy class CASACLIMA A VERONA - Italy		PSI		Tsi-min	
		CON	SENZA	CON	SENZA
Lunghezza totale	0,80 m				
Larghezza traversa EPS	0,25 m	-0,015 W/mK	0,023 W/mK	19,30°C	18,79°C
Larghezza asta ALU	0,01 m	-0,024 W/mK	0,014 W/mK	19,30°C	18,72°C
Larghezza pulita	0,54 m	-0,005 W/mK	0,047 W/mK	19,28°C	18,42°C

Valore medio pesato: **-0,0079 W/mK** **0,0393 W/mK** **19,29°C** **18,54°C**

The 2D and 3D ENERGY CERTIFICATION of the node with the RADICSOL System was performed by the TBZ Building Physics Center in Bolzano and is available in the download area of the www.radicsol.it website.

The study concerned the different Italian climatic zones in the different energy classes of the building, identifying the minimum thicknesses for the stratigraphy of walls and floors with RADICSOL:

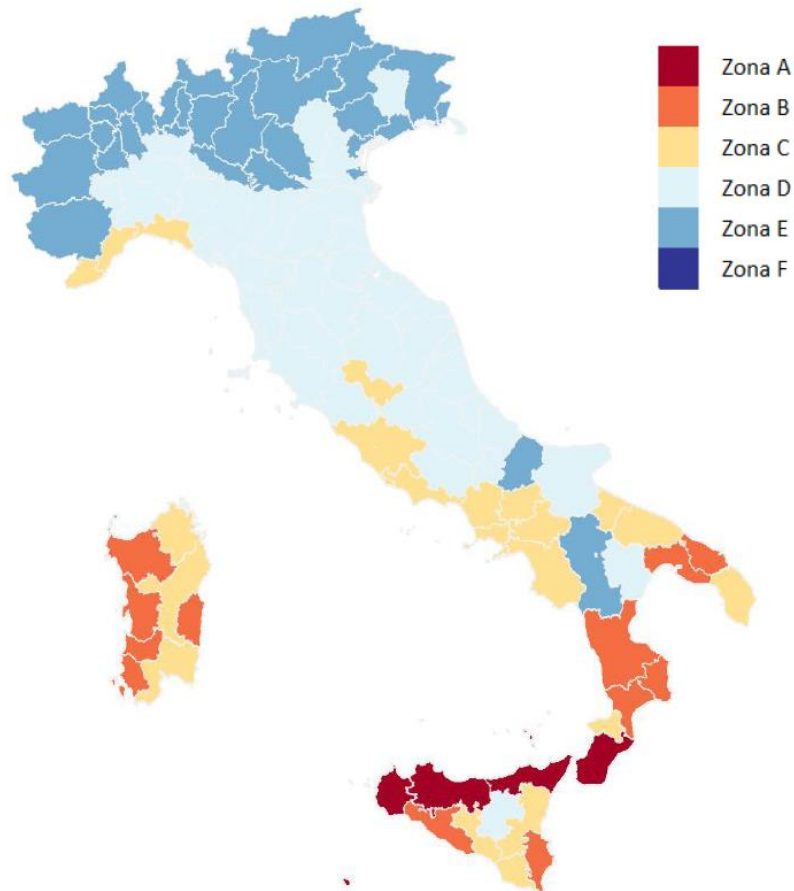
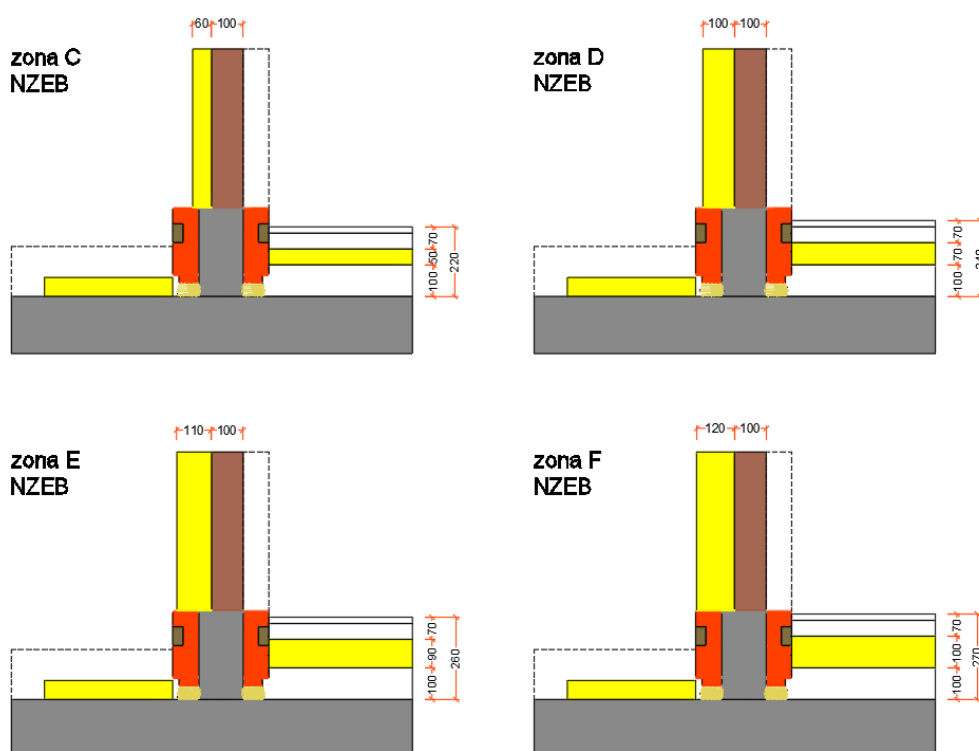
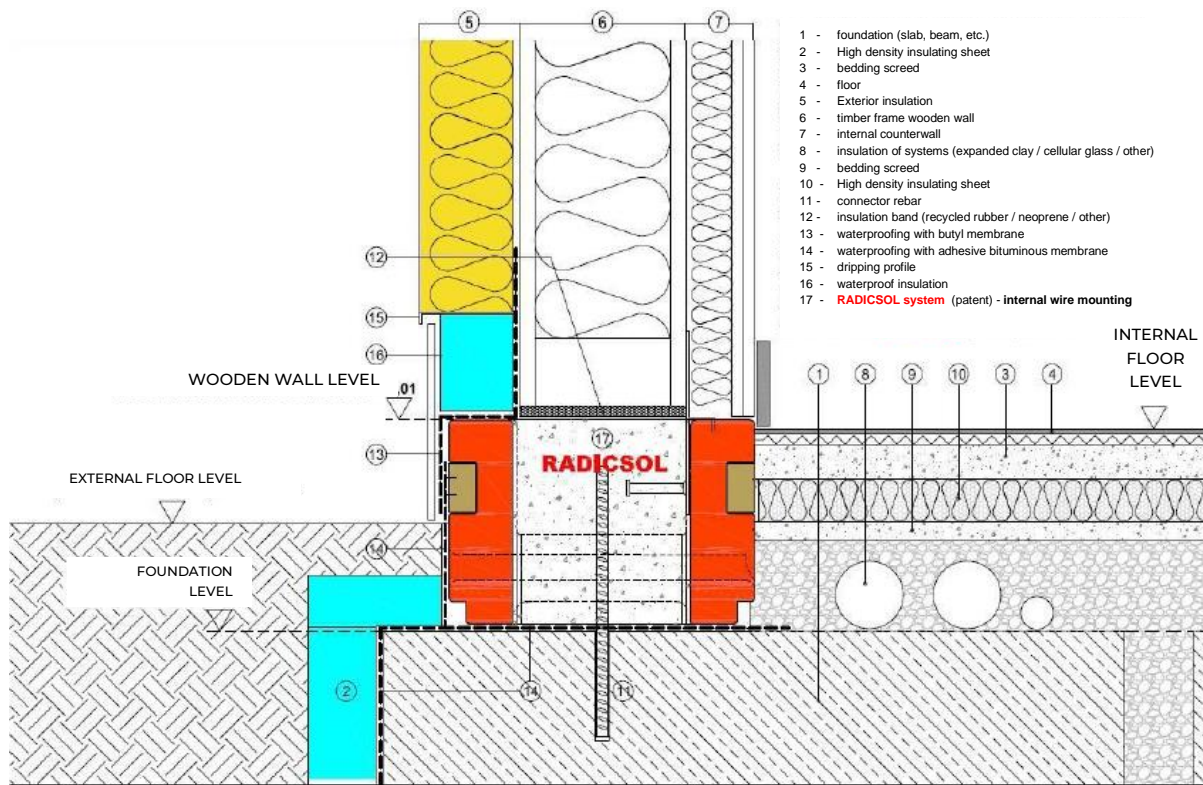


Fig. 2.46: Valori medi di zone climatiche comunali nelle varie province d'Italia

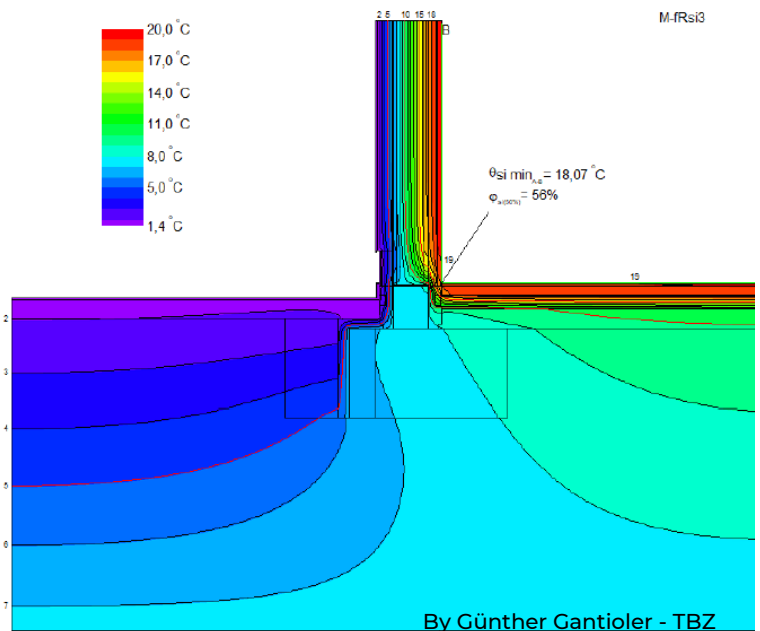
The different widths and variable height up to 31 cm allow you to always have the right node, below are the minimum stratigraphy in the different climatic zones with XLAM 100mm and RADICSOL:



Going into detail of a typic node with RADICSOL 200, 196mm timber frame wall with and integrated brackets, we have the following values of PSI and Tsi min:



The thermal analysis of the section with "internal wire brackets" referring to the climatic zone of Verona (Italy) shows how with RADICSOL a very low PSI energy dispersion values and a very high minimum temperatures are obtained, well above legal limits for mold and condensation, and also compatible with much more restrictive regulations such as that of "Passivhouse"



The following table summarizes the performance of the node in different Italian climatic zones:

Tipo	Luogo	PSI	Tsimin
F-Is 200	1 Selva	-0,190 W/mK	17,0°C
	2 Vipiteno	-0,176 W/mK	17,5°C
	3 Verona	-0,143 W/mK	18,1°C
	4 Roma	-0,128 W/mK	18,7°C
	5 Palermo	-0,094 W/mK	19,3°C

DURABILITY OF WOODEN WALL on RADICSOL

To confirm the excellent characteristics of RADICSOL, the prestigious German Institute for Technical Physics of Timber Construction FRAUNHOFER has tested the durability over time of the wooden wall resting on RADICSOL taking into account the most critical points which in this case are the portions of the internal and external corners at the base of the wall:

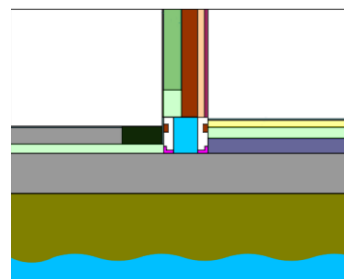
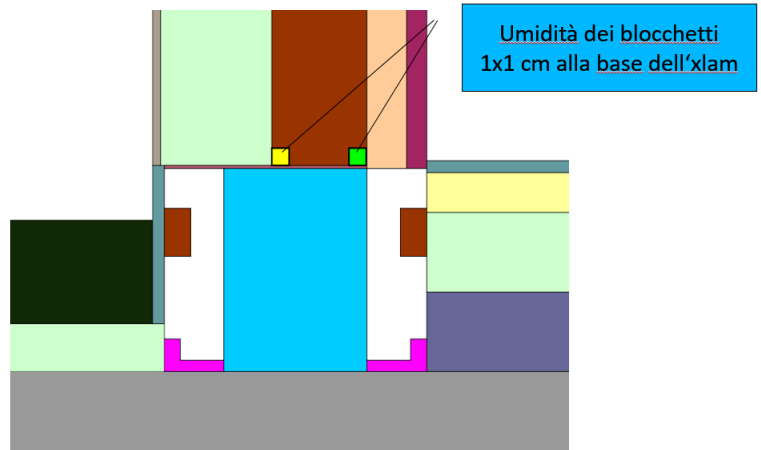
In these points there are normally the most extreme thermo-hygrometric conditions that can trigger biological processes that over the years lead to the degradation of the wall itself.

One of the tests have 100mm XLAM wall on a RADICSOL 140 curb, with a load-bearing slab foundation.

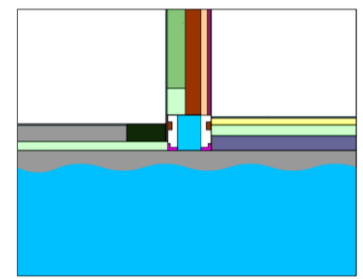
The calculation also takes into account the initial humidity of the materials and the thermo-hygrometric trend in the years following the installation.

In addition, two different moisture load situations were evaluated:

- the first with relative humidity present in the stalls of 99%; This corresponds to the normal situation for the ground
- the second with the plate saturated with 100% water, imitating a high aquifer directly under the house (which could also represent a temporary flooding)



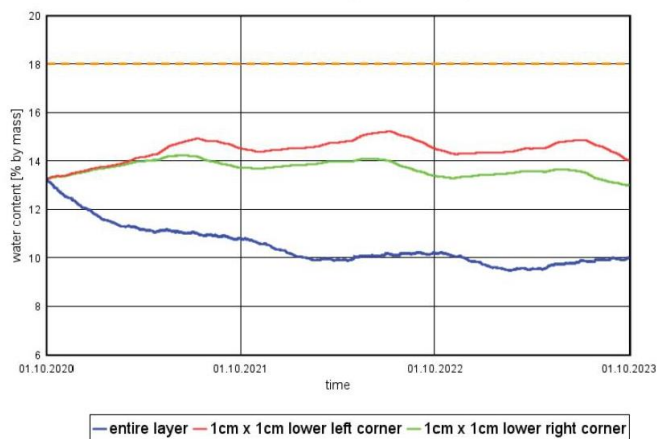
LOW AQUIFER
(Case 1)



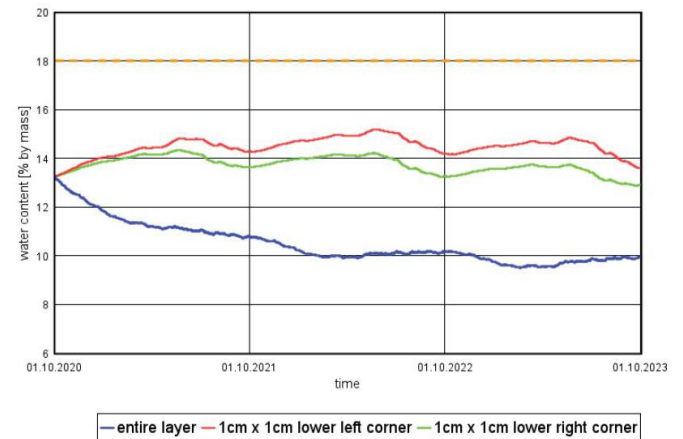
HIGH AQUIFER
(Case 2)

Below are the graphs always referring to the climatic zone E in which it is shown that in both cases the water content at the base of the wall is always much lower than the limit (yellow line) beyond which the degradation of the wall is triggered

Verona - water content in the CLT board (Case 1: 99%)



Verona - water content in the CLT board (Case 2: 100%)

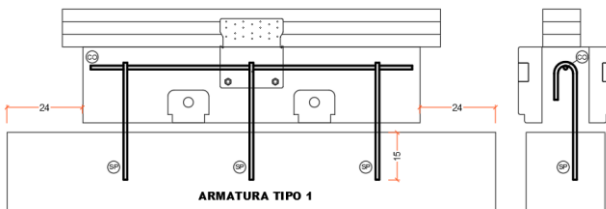


The report of HIGROTHERMAL EVALUATION OF A WOODEN WALL FOUNDATION WITH THE INNOVATIVE PRODUCT "SYSTEM RADICSOL" can be downloaded in the download area of the site www.radicsol.it

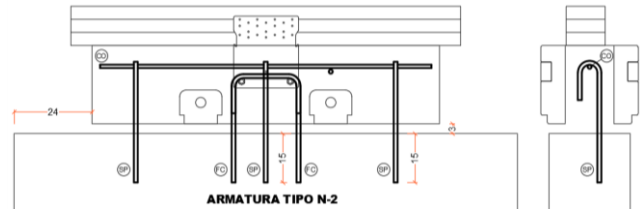


INCREASED WIND AND EARTHQUAKES SAFETY.

The static resistance of the RADICSOL System with BRACKETS INTEGRATED IN CONCRET and POST-MOUNTED REBARS, in its real configuration from the wall to the foundation, was experimentally verified at the laboratories of the Department of Civil Engineering, Building and Architecture of the Polytechnic University of Marche with an important series of tests

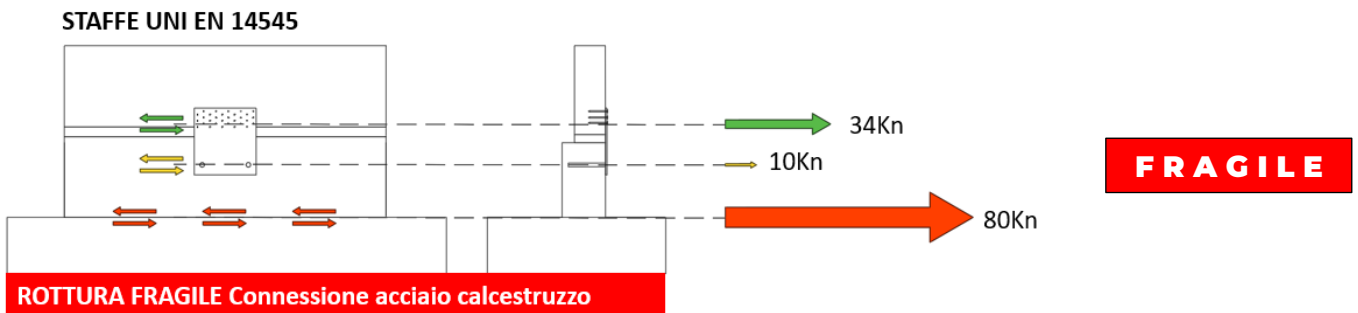


Shear rebars + SLP20

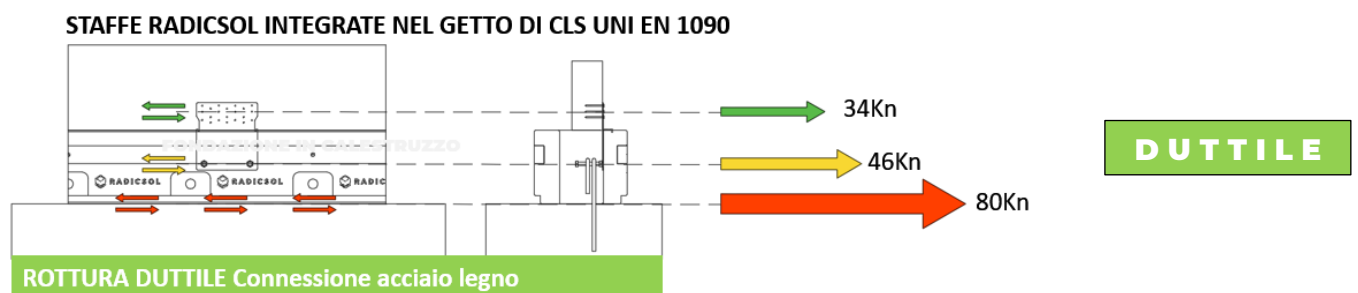


Shear rebars + SLP20 + bracket shear rebars

These tests have verified the great ductility of RADICSOL system which therefore allows to design the ground connection with anti-seismic CRITERIA. This result depends on the greater resistance on the concrete side of the INTEGRATED BRACKETS compared to normal UNI EN 14545 connectors:

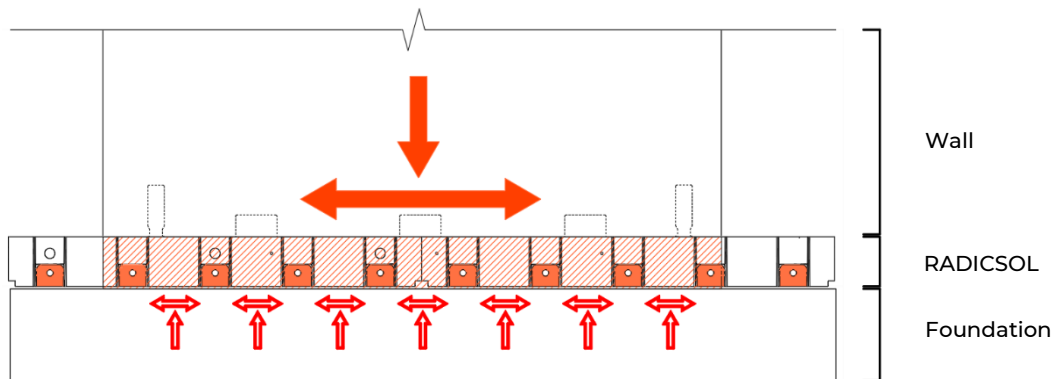


With flat brackets type UNI EN 14545, with the same nailing, the breakage occurs in the steel-concrete connection and therefore in a fragile way.

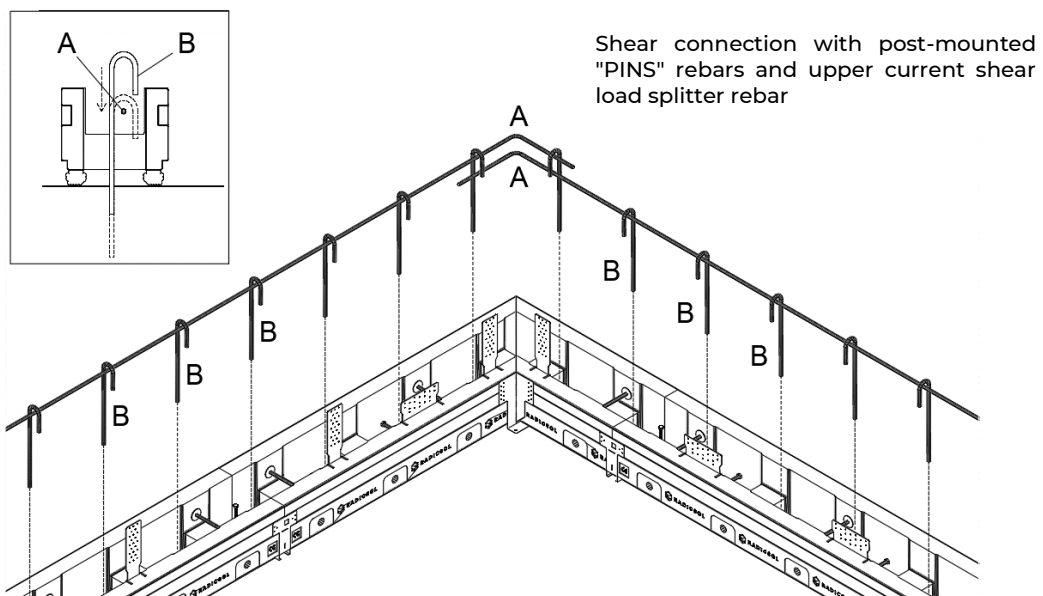


With RADICSOL integrated brackets, with the same nailing, the breakage takes place in the wood-steel connection and therefore in a ductile way with energy dissipation, ideal in the event of an earthquake.

From a static point of view, the RADICSOL curb works as a dormant beam that transmits only compression and shear load stress from the wooden wall to the foundation (slab or beam). The bending stresses that in a beam normally generate traction in the lower bars are absent because these are absorbed by rebars of the foundation immediately below, and therefore these rebars in the dormant beam are superfluous.

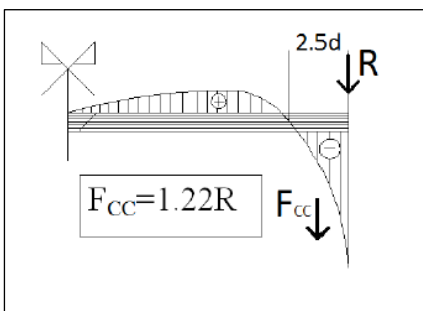


The shear connection between curb and foundation (slab or beam), can be made by means of PINS (B) made with suitably shaped rebars, placed before concrete casting with chemical anchor:



The upper longitudinal reinforcement (A), on the other hand, has the secondary task of distributing horizontal shear forces generated by shear plates along the axis, and therefore must be inserted or replaced by the use of FRC concrete (fiber-reinforced).

SHEAR PINS must be calculated in section and pitch according to design stresses of building, performing a local shear check in which the design shear resistance of connectors must be greater than design cutting action: $R_d > F_d$.

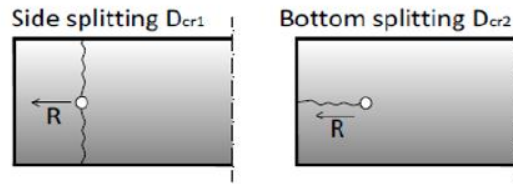


Theoretically, for calculation of connectors in concrete in absence of slow rebars (curb-foundation node), it must be taken into account that a pin embedded in concrete behaves like a pole inserted in elastic soil (Vintzeleou e Tassios, 1985).

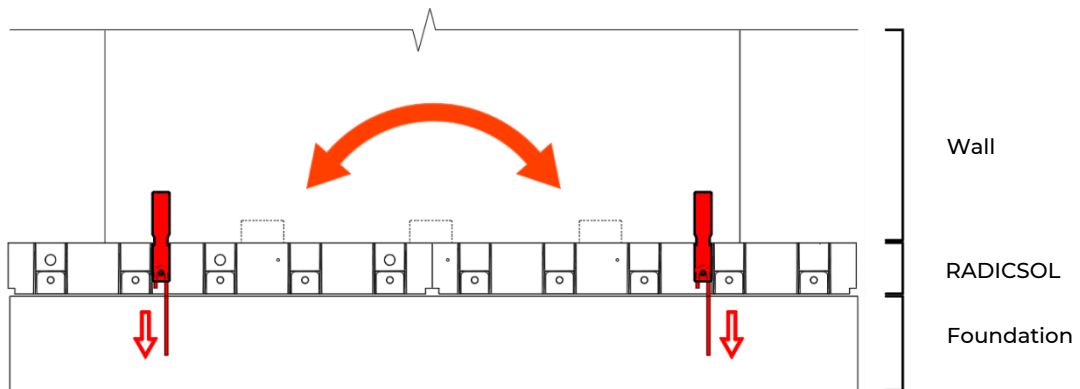
For this reason, a shear force R acting on pin generates a trend of stresses in concrete as shown in lateral figure.

The result of compressive stresses on concrete (F_{CC}), which occur for a pin length of approximately $(2.5d)$, where "d" represents the diameter of pin, is responsible for the spalling breakage of concrete.

In the absence of rebars in the concrete element, two different failure modes can be generated, depending on the position of the pin with respect to the concrete free face: breakage by side splitting and by bottom splitting



LIFTING ACTIONS deriving from the rotation stresses in the plane of the walls, on the other hand, are contrasted with anti-lifting brackets (hold down) that transmit vertical action directly to the foundation by shaped rebars with chemical anchor, placed before concrete casting; therefore, the RADICSOL curb remains neutral from these stresses:



RADICSOL STRUCTURAL CALCULATION SOFTWARE

Available in download area of website www.radicsol.it/download, allows you to perform structural design calculations and verify every connection and easily calculate all RADICSOL elements, SLP20 shear brackets and HD50 lifting brackets according to building stresses. It return detailed reports of each verification and carpentry detail of each wall. Within the software is also available a VIDEO TUTORIAL for use

2- Input cordolo RADICSOL

Tipo di cordolo	cordolo	RADICSOL 140
Classe di resistenza del calcestruzzo	Classe	C25/30
Numero di spinotti per dente	ns	1
Passo spinotti (400=Spinotto/i su ogni dente; 800=Spinotto/i ogni due denti)	passo	400 mm
Diametro dello spinotto	db	(D 12 (mm))
Tipo di acciaio dello spinotto	tipo acc.	Fe B450c
Numero di ferri ripartitori	nfr	1
Diametro dell'armatura longitudinale di ripartizione, tipo Fe B450c	dfr	(Ø 10 (mm))
Copriferro D	max	70mm
Ancoraggio perno P a taglio	max	200mm
Altezza corrente ferro ripartitore H (ESCLUSO REGOLAZIONE CASSERO)	reg.	160mm + reg.

SCHEMI CHIODATURE SLP20

Scelta schema di chiodatura	schema	F
Scelta connettore	tipologia	chiodo anker
Scelta caratteristiche connettore	tipo	1

Caratteristiche connettore scelto		CHIODO ANKER	
diametro	4 mm	diametro	4 mm
lunghezza	40 mm	lunghezza	40 mm
R _u	2,41 kN		



FAST AND SIMPLE TO INSTALL FORMWORK, pre-mountable structural brackets RADICSOL, casting concrete and fixing the wooden walls. In fact, with the help of a few tools (tracer wire, screwdriver, dowel, saw and laser level) you can mount RADICSOL on slab foundation or on beam foundation in the same way as a wooden root beam (see "RADICSOL ASSEMBLY INSTRUCTIONS" in the "download" area of the site www.radicsol.it/download):

Trace the internal wall wire on the ground in case of brackets placed inside the wall, or trace the external wire in case of brackets placed outside the wall



Wall tracing

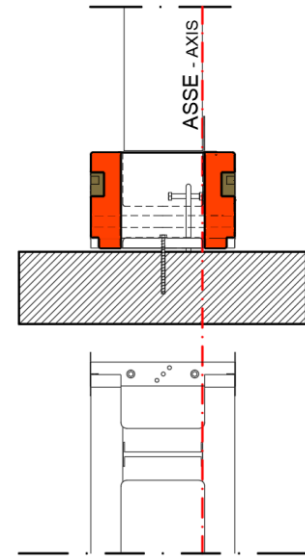
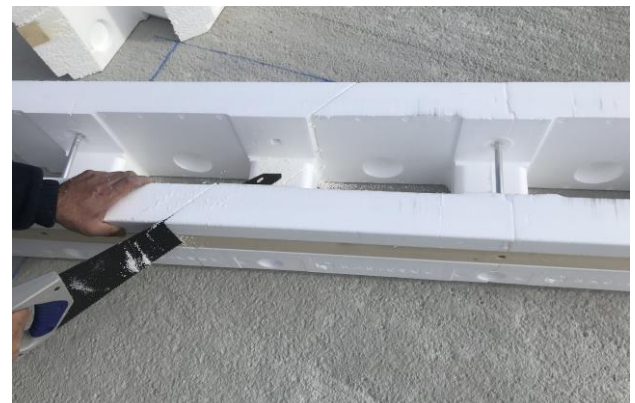


Fig.1

Cut the formwork with appropriate inclination with a wood saw to form the corners. By cutting 2 bars with opposite angles, you can form 2 complete corners without scraps.

Align the inner edge of the formworks along the track to the ground (Fig. 1) and, at the end of the perimeter and after verifying the perfect alignment, fix the formworks together with the Radicsol longitudinal brackets.



Angular cut

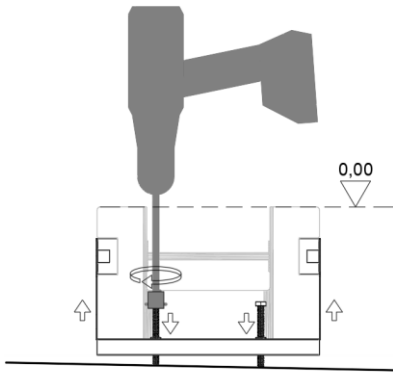


Corner positioning



Longitudinal connection

Level the longitudinal brackets Radicsol using the adjusting screws placed on bracket with the aid of laser level

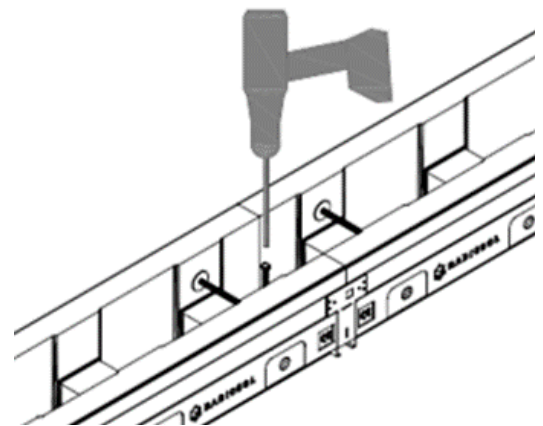


Level setting with laser

Proceed to setting level of the corners using Radicsol corner brackets and then fix both the longitudinal brackets and the corner brackets to the ground with self-tapping concrete screws.



Corner levelling



Fill the gap between the formwork and the foundation using polyurethane foam for final fixing and to prevent concrete from leaking.

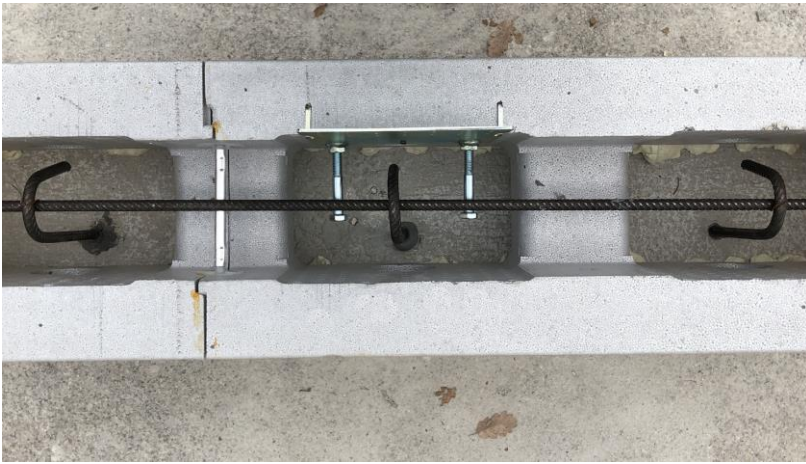
Once the fixing is completed is possible to install Radicsol pre-assembled brackets and rebars



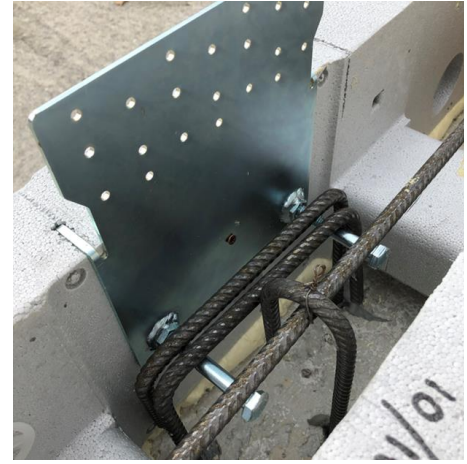
Gap filling



Installation of SLP20 and HD50 structural brackets



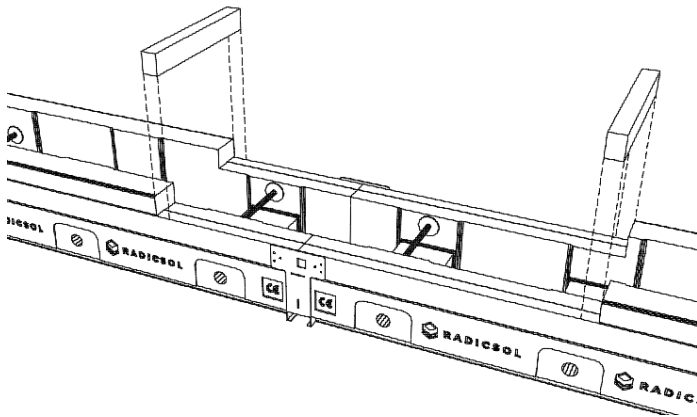
Laying rebars for shear loads



Laying rebars for brackets

Once completed rebars installation, model threshold spaces for doors and balconies, and proceed with concrete casting.

After 2-4 days (depending on the outside temperature) it is possible to lay the walls after laying a bituminous sheath tape on the RADICSOL curb



Threshold space modelling



Concrete casting

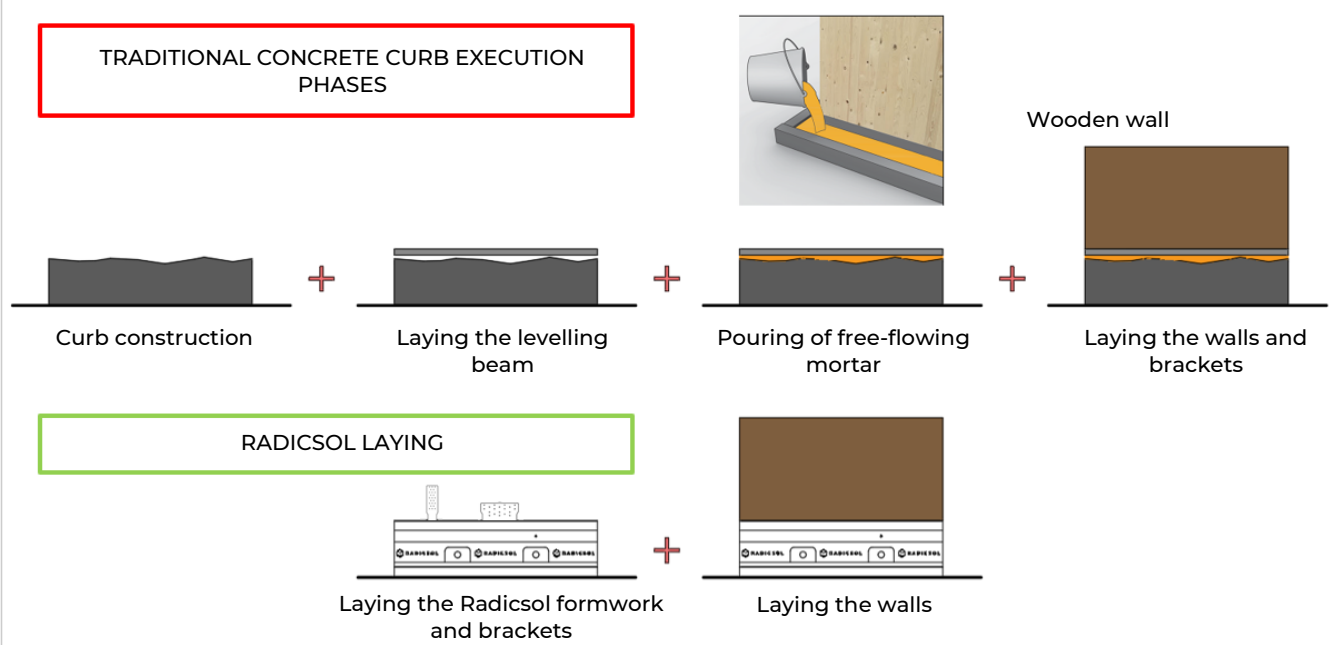


Wall mounting



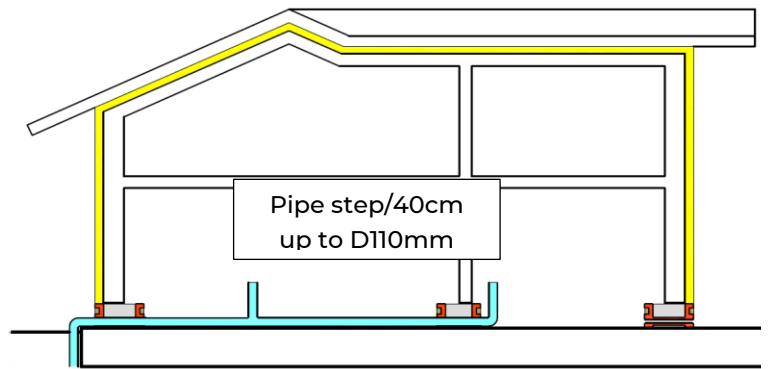
SIMPLIFICATION OF CONSTRUCTION PHASES

RADICSOL curb can be mounted even after walls prefabrication because the installation follows the design measures without errors: this avoids every preventive site inspection to take executive measures of foundation curb. With RADICSOL you can eliminate larch or metal levelling beams and the necessary pouring of free-flowing mortar: everything is simpler with RADICSOL!!



moreover, thanks to the presence of EPS crosspieces every 40 cm, Radicsol allows to decide also in a second time the steps of the technological systems with considerable simplification of work.

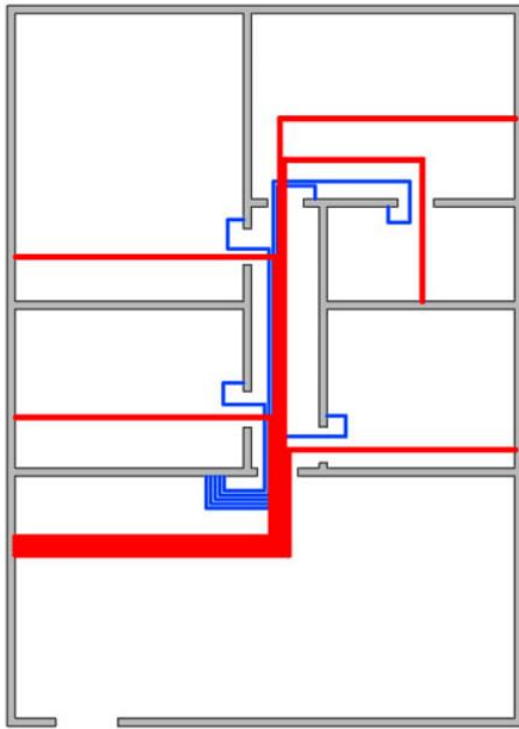
In fact, RADICSOL allows the passage of pipes after the curb jet without any concrete breaking but simply by drilling the EPS crossbars, and appropriately cutting the sides of the formwork to reach counterwall



Wall pipes passages

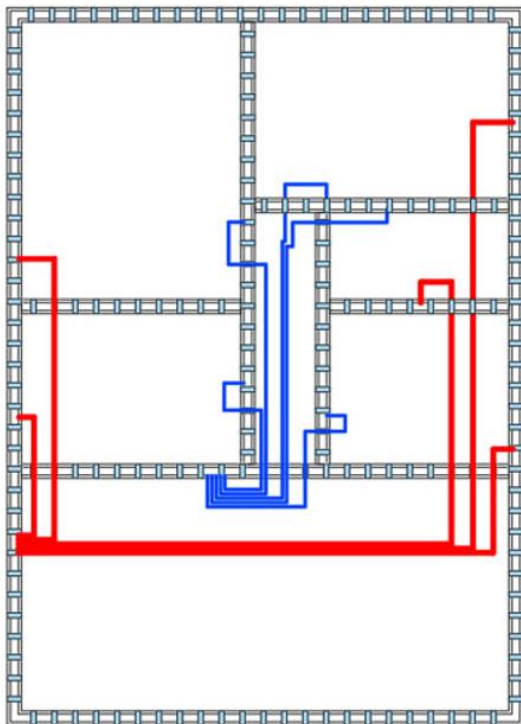


Horizontal pipes passages



Pipes laying with traditional curb or without curb

The concentration in the door passages forces the systems to numerous overlaps that require considerable and expensive thicknesses of lodging mortar



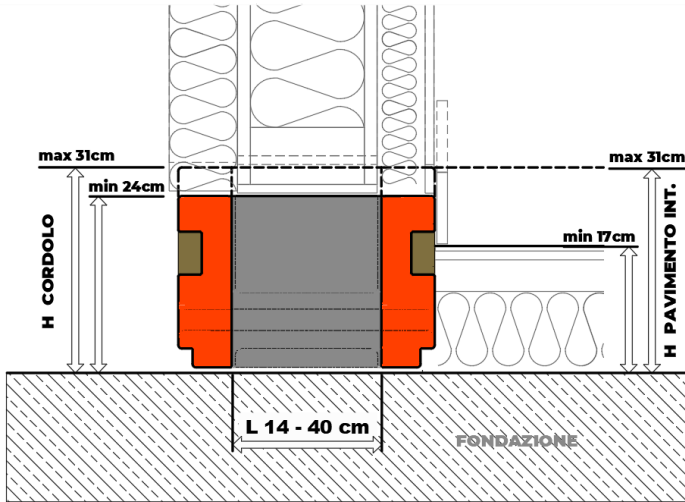
Pipes laying with RADICSOL

With RADICSOL even after the execution of the curb and the elevation you can organize the laying of the different systems in a coordinated manner so in possible a GREATLY LIMITING OF THE THICKNESS OF THE PACKAGES ON THE GROUND.

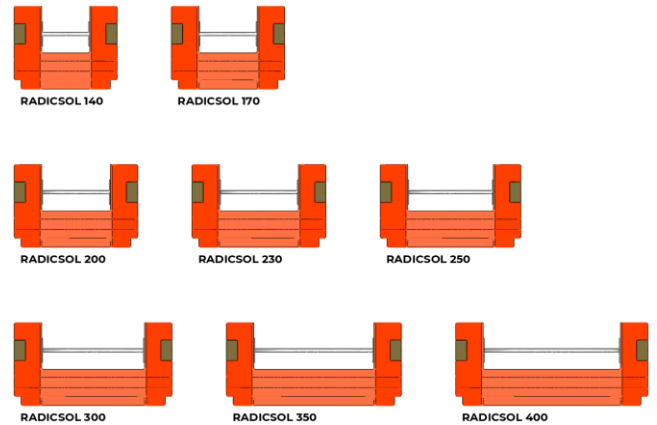


SYSTEM VERSATILE

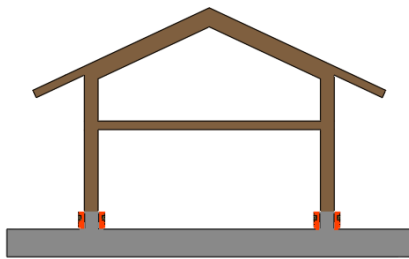
RADICSOL, thanks to the wide range of widths and adjustable height, and to pre-assembled structural brackets mountable both on the internal and external wire, allows you to adapt to any type of wall and correctly make ground attack on any type of foundation or elevation; provides space for the lodging of internal systems and allows the installation of external and internal insulation



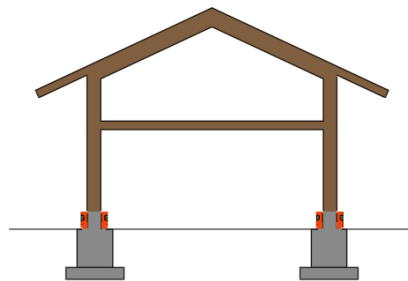
RADICSOL DIMENSIONAL RANGE



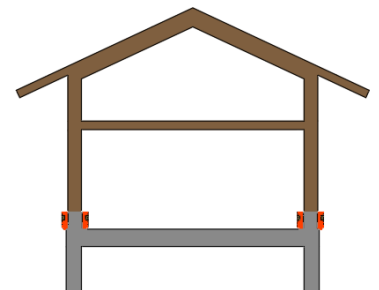
RADICSOL is suitable for mounting on any type of foundation and also on masonry or concrete basement:



RADICSOL on concrete slab



RADICSOL on concrete beam



RADICSOL on basement

RADICSOL is suitable for mounting XLAM and TIMBER FRAME walls, but also for STRAW BUILDINGS or in prefabricated or rectified blocks of any kind:

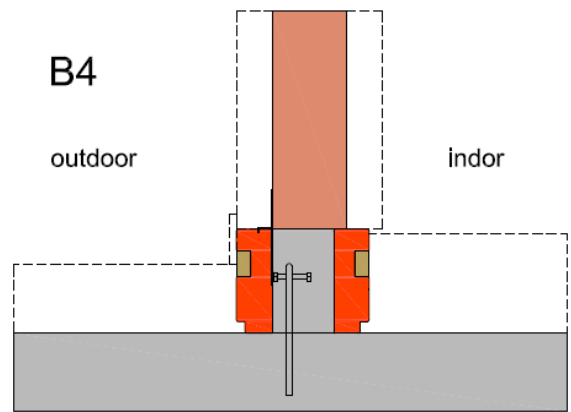
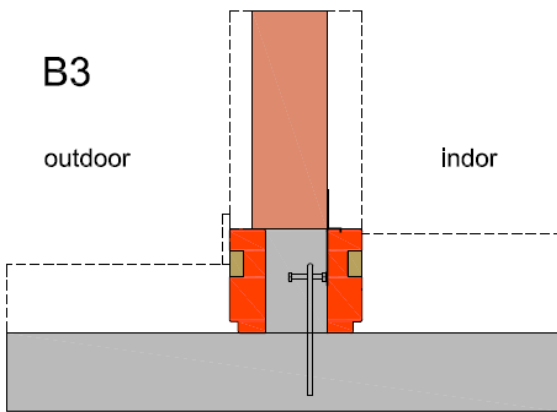
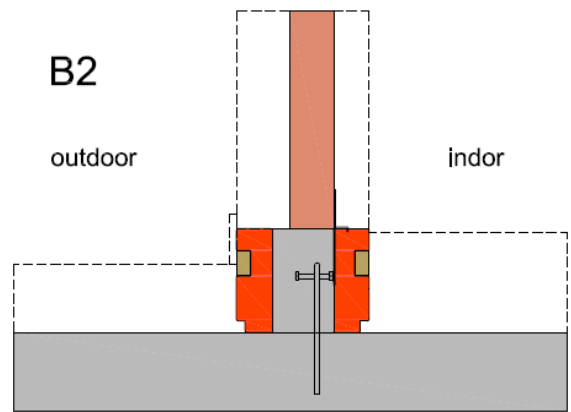
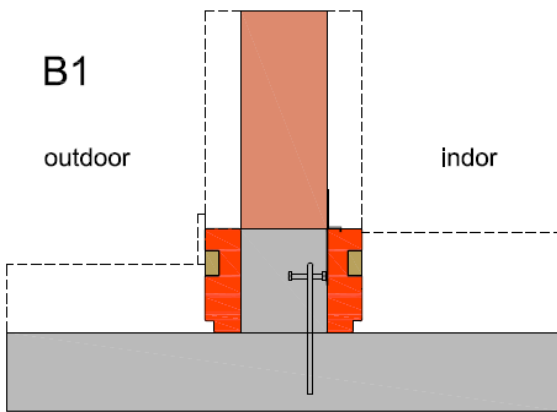


RADICSOL with XLAM

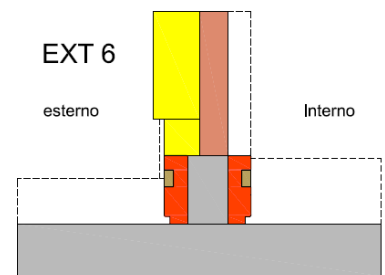
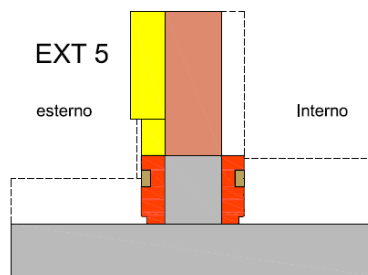
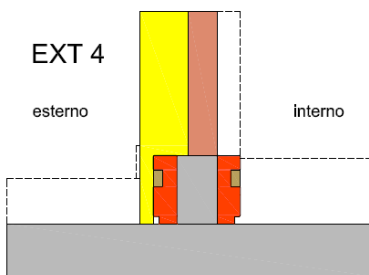
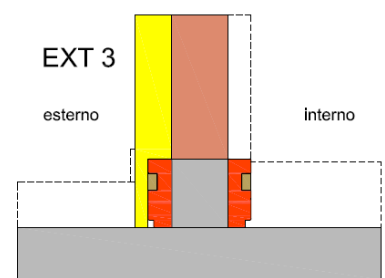
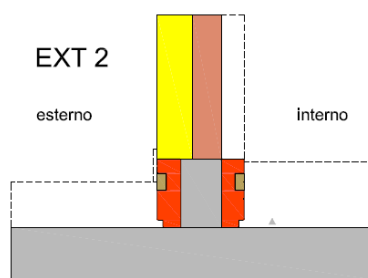
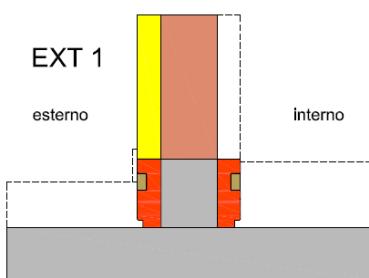


RADICSOL with TIMBER FRAME WALLS

With RADICSOL pre-mountable brackets, is possible to follow different patterns with INTERNAL BRACKETS OR WITH EXTERNAL BRACKETS:



External insulation can be mounted in different ways always ensuring continuity of insulation:

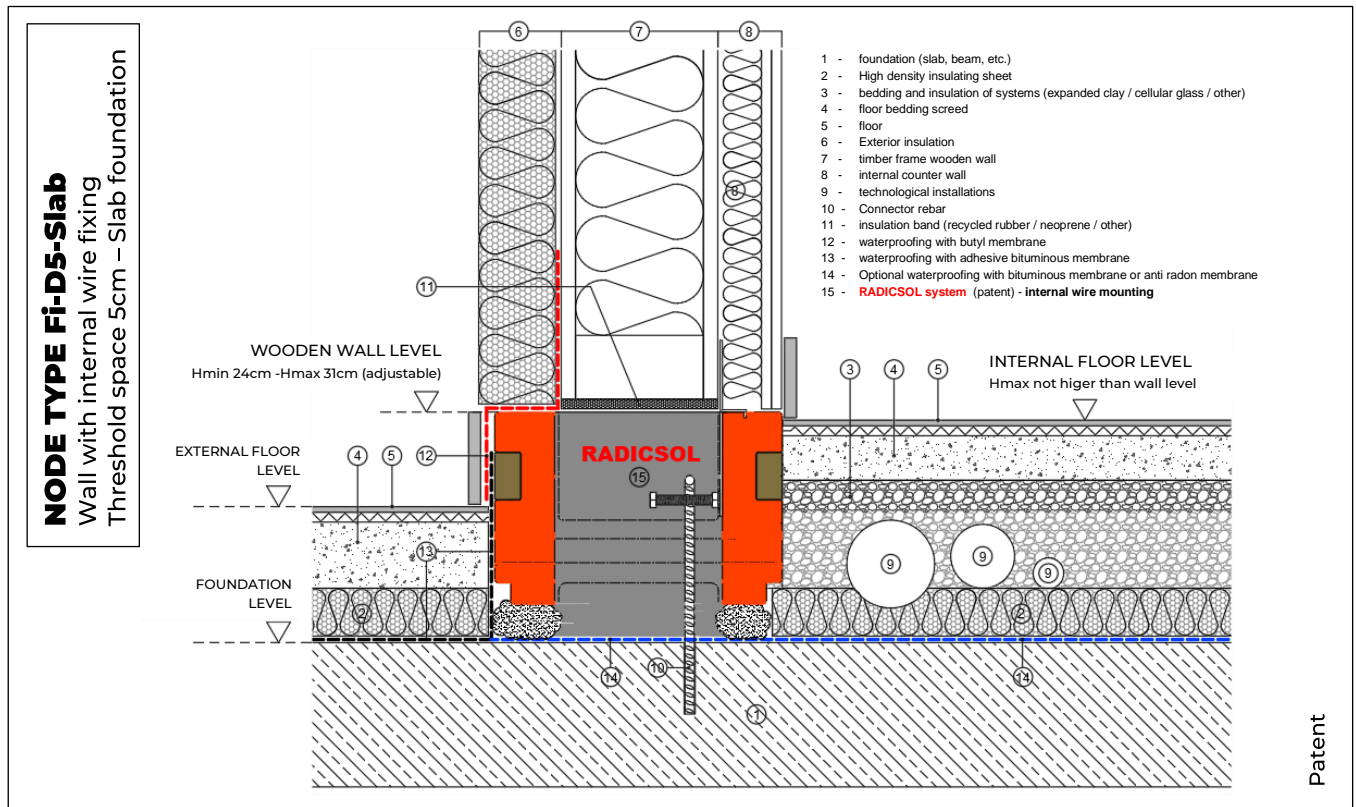


NODE SCHEMES

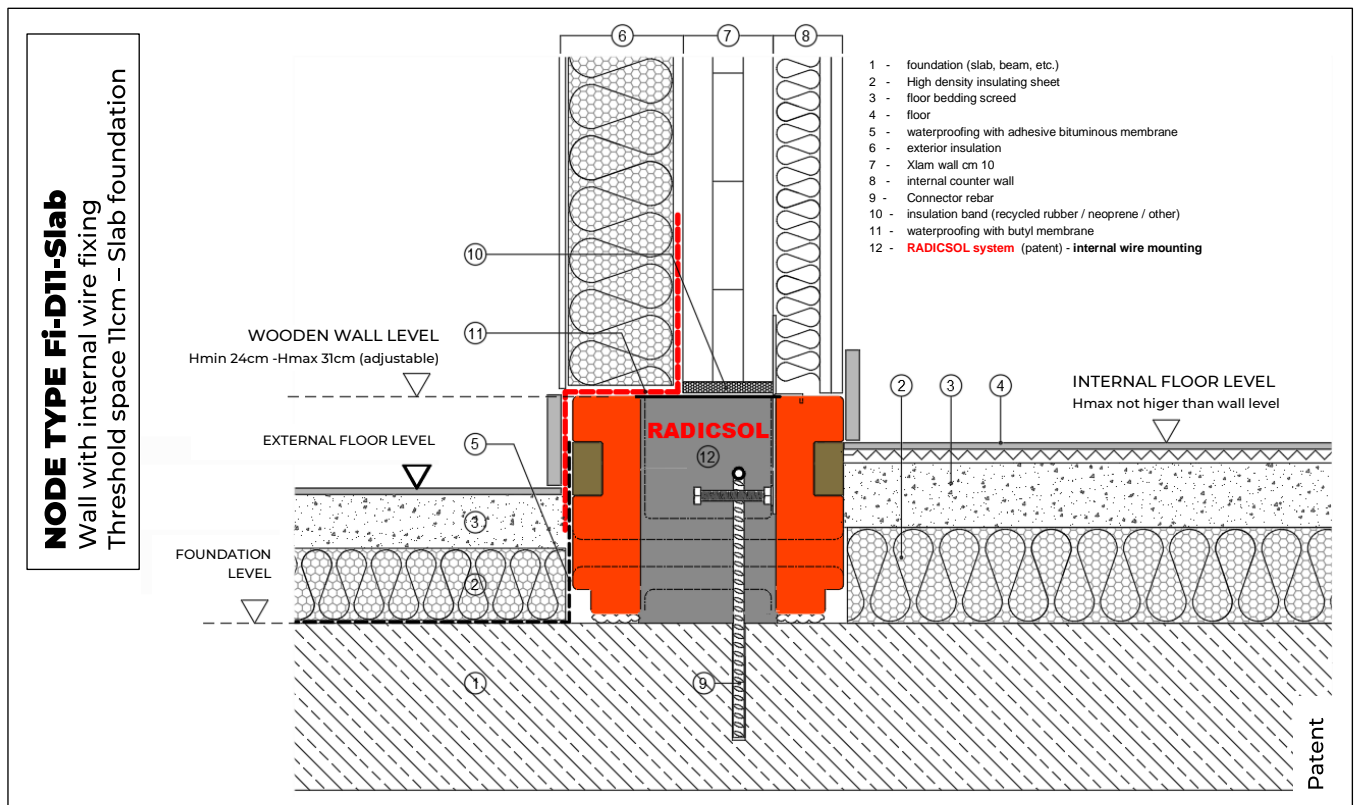
TYPE NODE SCHEMES

Below are some recommended node schemes with RADICSOL, but the versatility of the system is very wide and everyone can find the own solution:

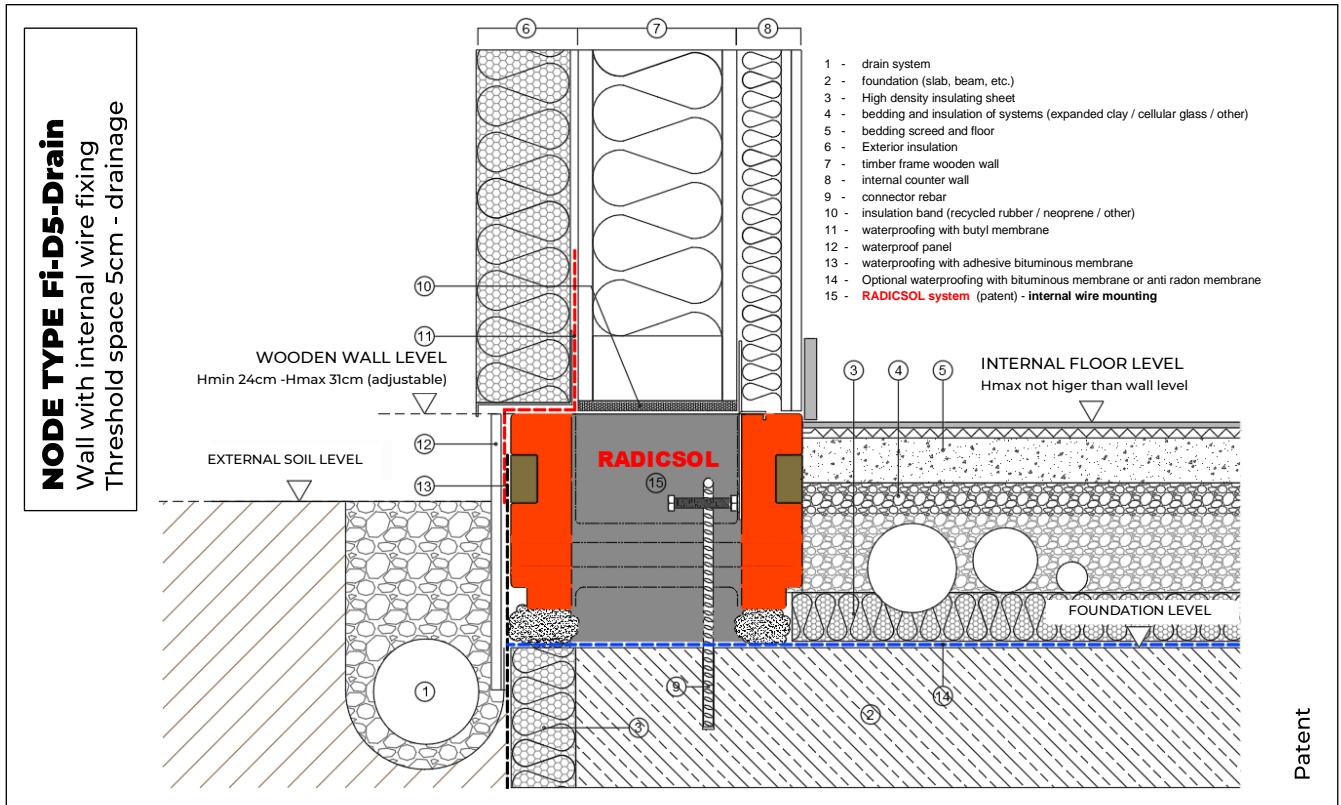
RADICSOL WITH TIMBER FRAME WALL ON CONCRETE SLAB FOUNDATION:



RADICSOL 140 WITH XLAM cm 10 ON SLAB FOUNDATION:

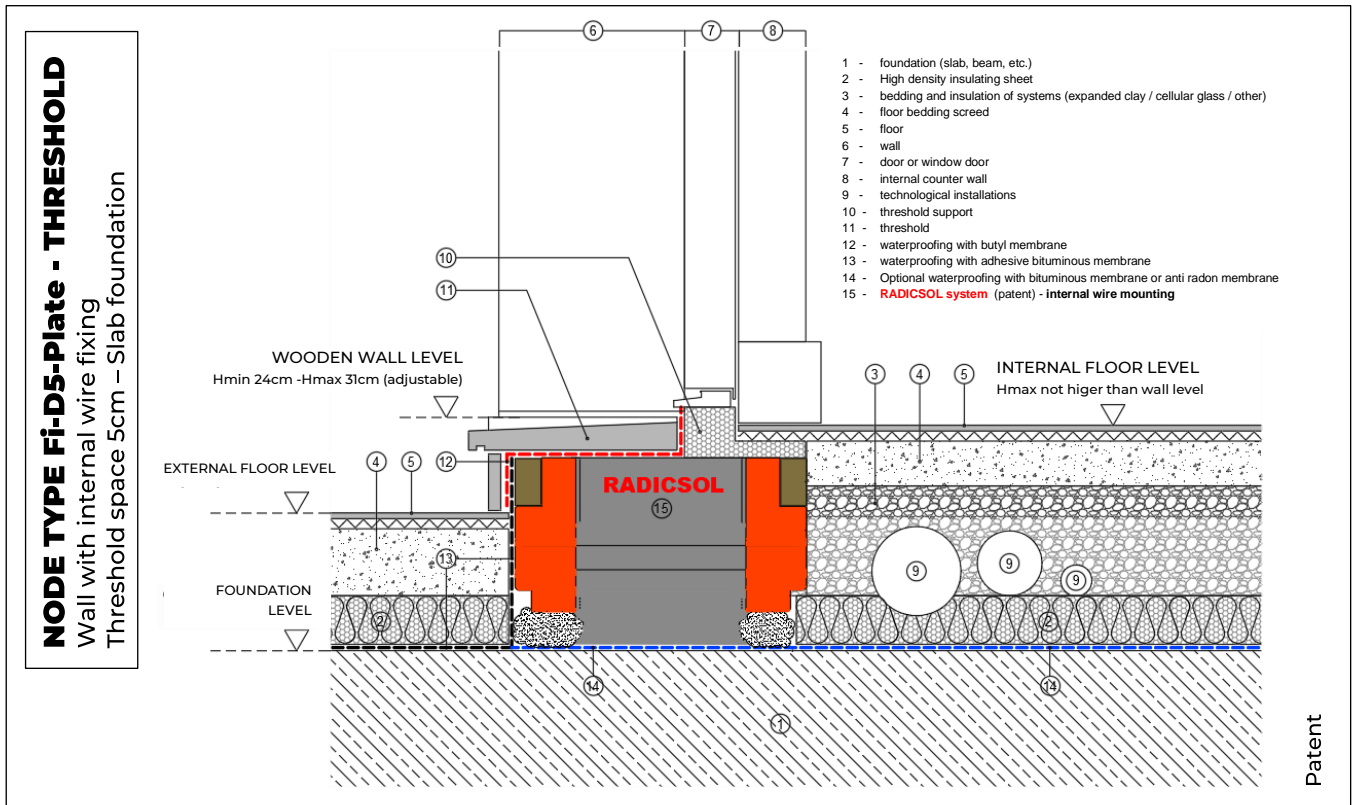


RADICSOL WITH DRAINAGE:

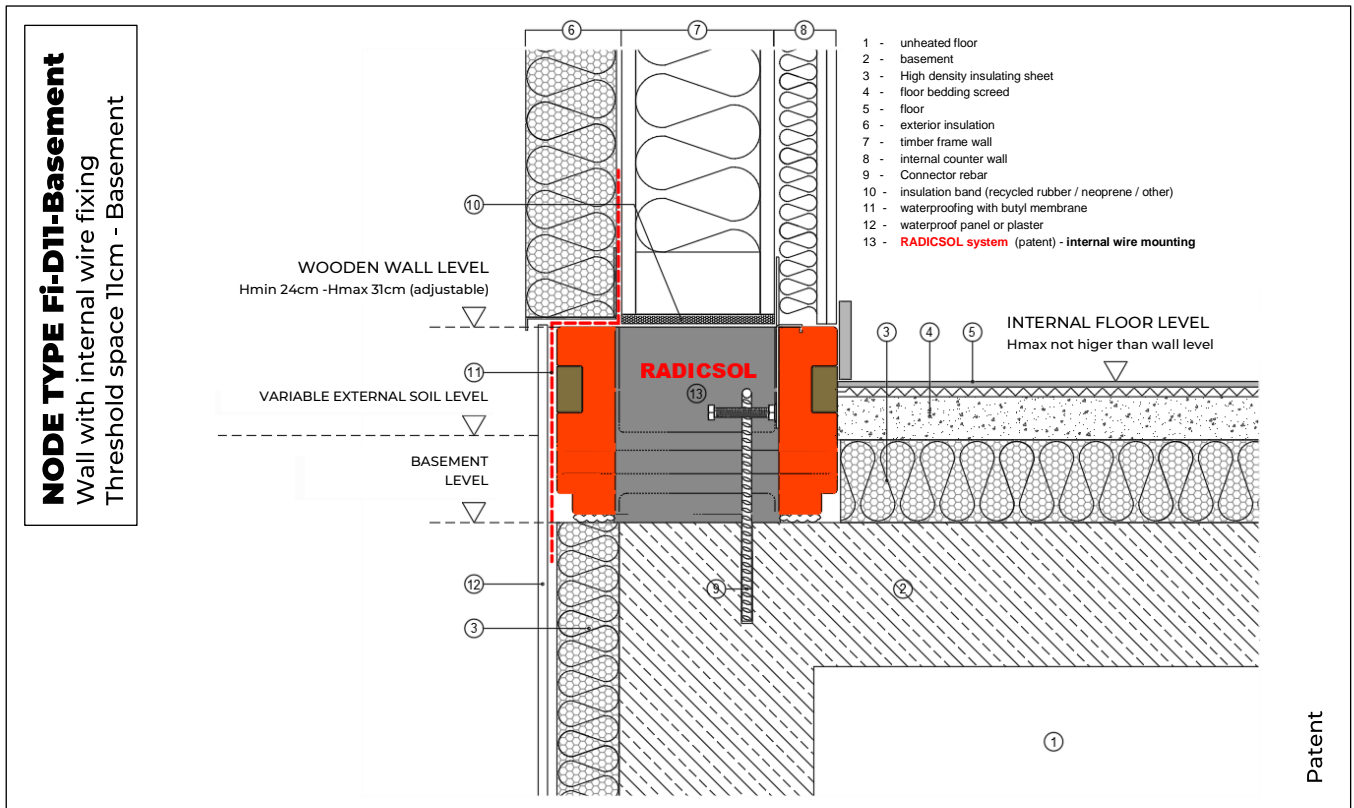


Radicsol allows solution with gravel drainage close to the wall as is indicated in the ÖNORM B3691

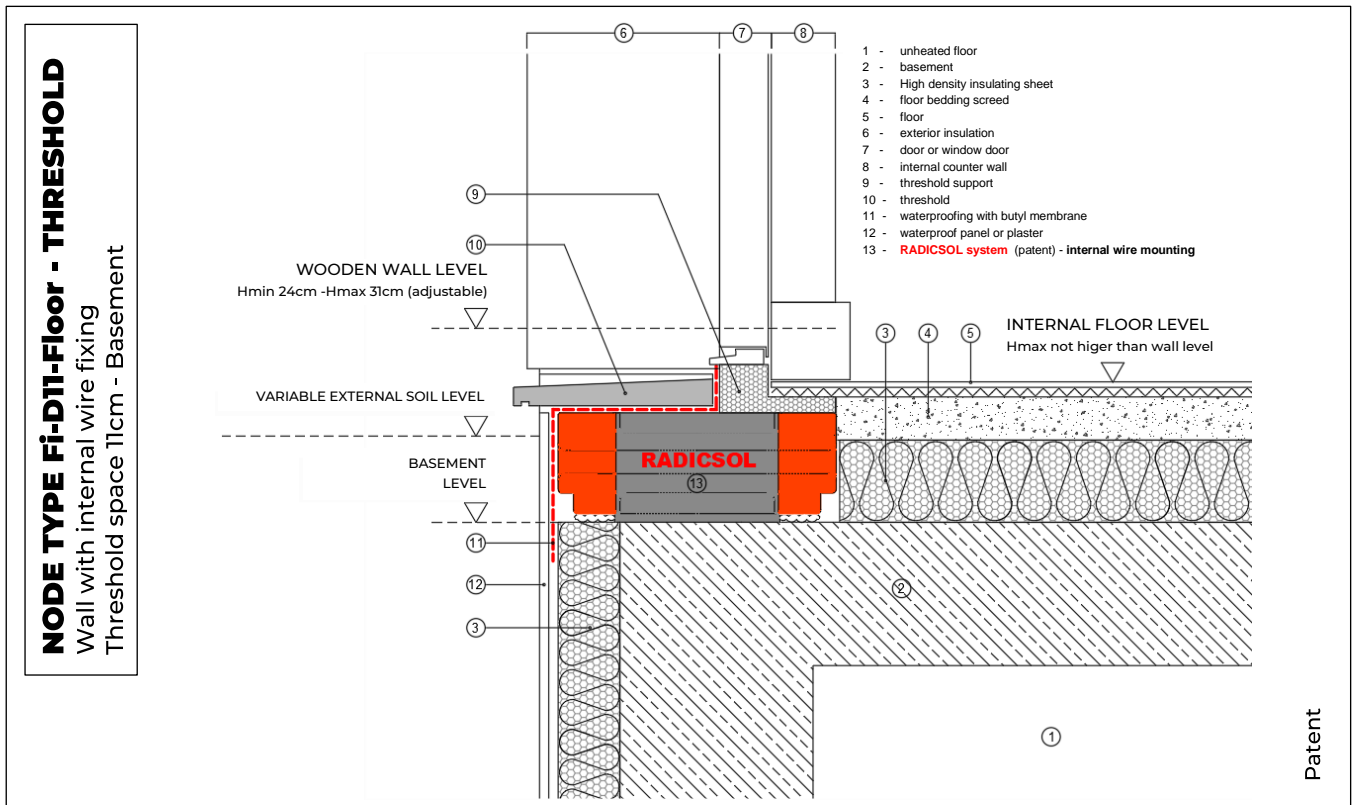
RADICSOL ON SLAB – DETAIL WITH THRESHOLD SPACE 5cm:



RADICSOL ON BASEMENT:

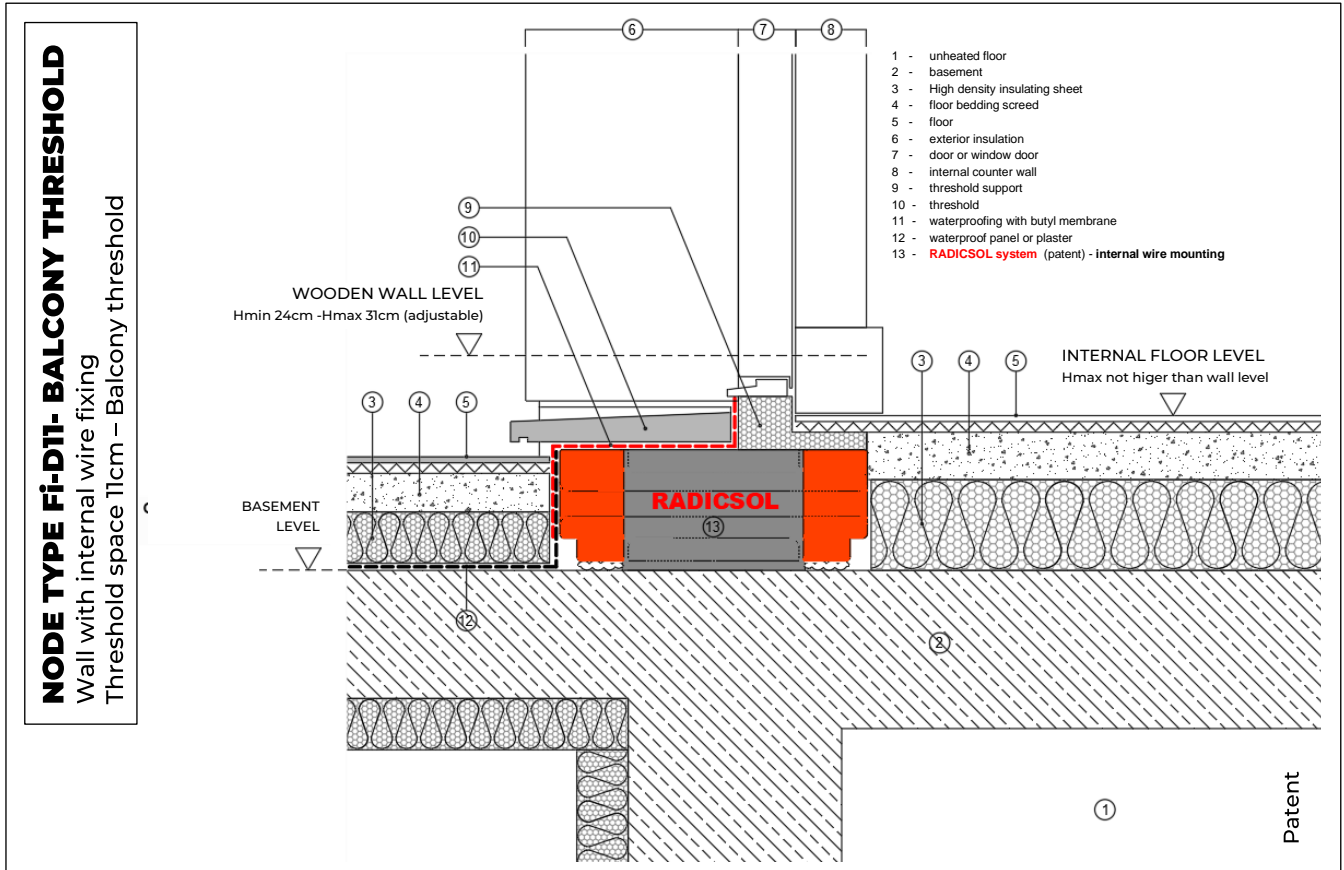


RADICSOL ON BASEMENT – DETAIL WITH THRESHOLD SPACE 11cm:

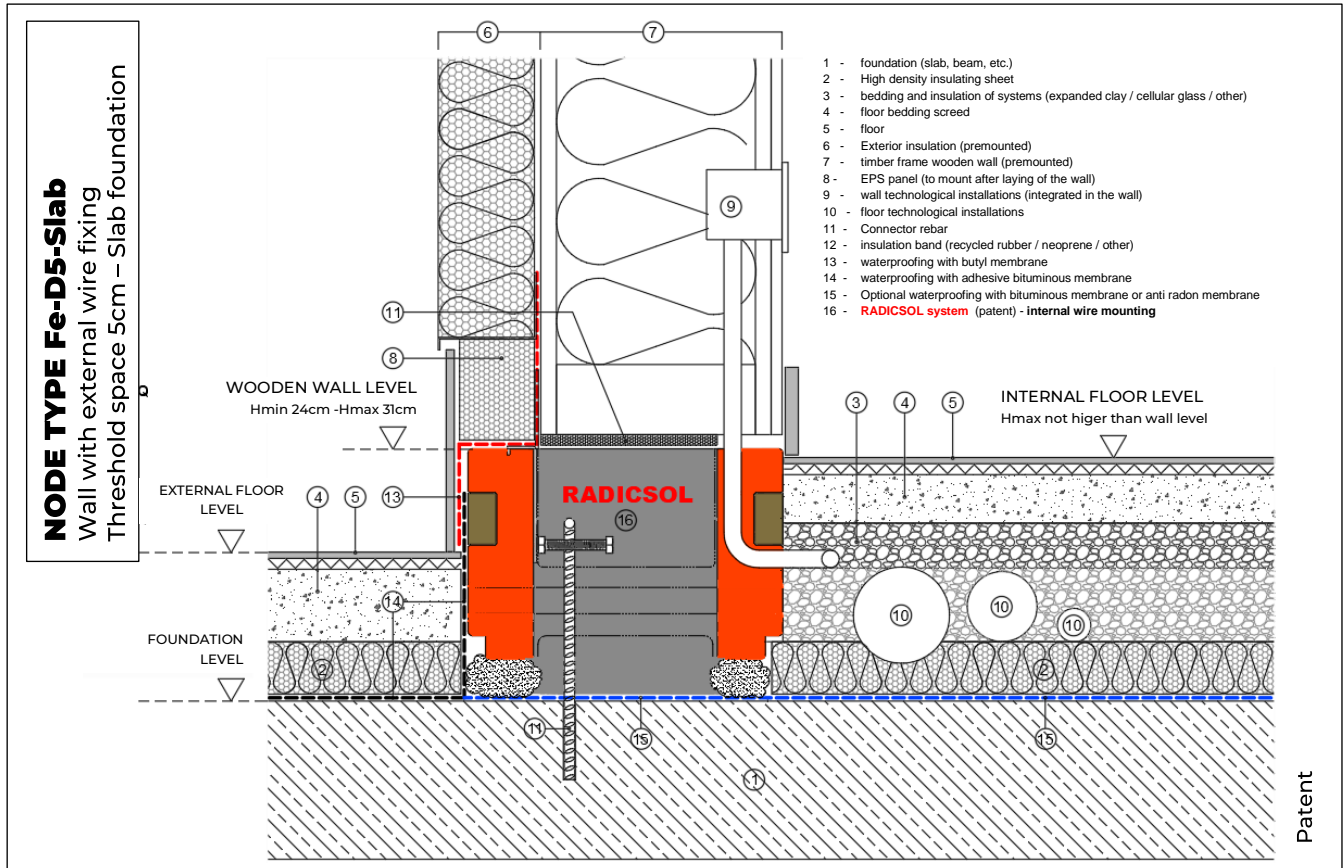


This solution is also useful in cases where coplanarity between external and internal floor is necessary and where it is necessary to have little thickness of the floor package

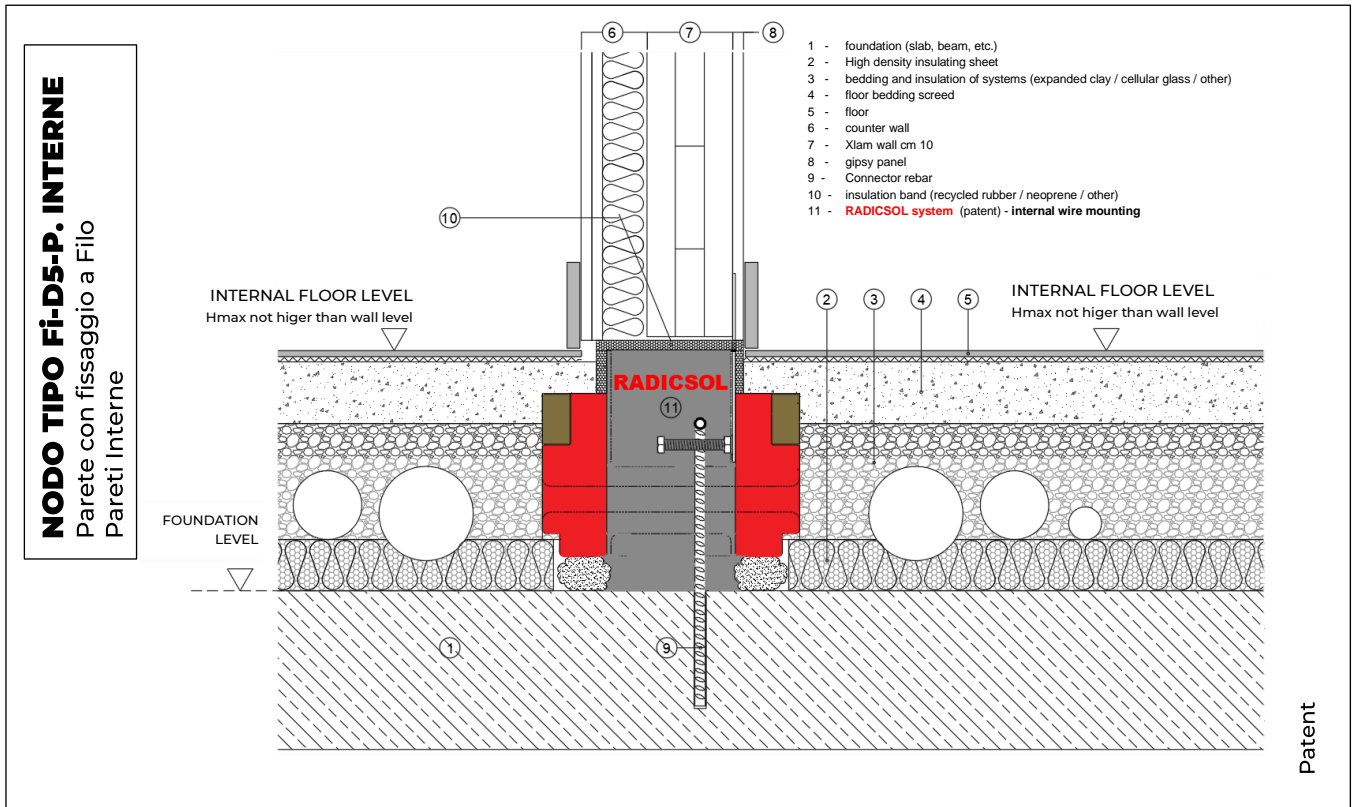
RADICSOL ON ELEVATED FLOOR – DETAIL WITH THRESHOLD SPACE 11cm AND BALCONY:



RADICSOL WITH PREFABRICATED WALLS WITHOUT INTERNAL COUNTERWALL:

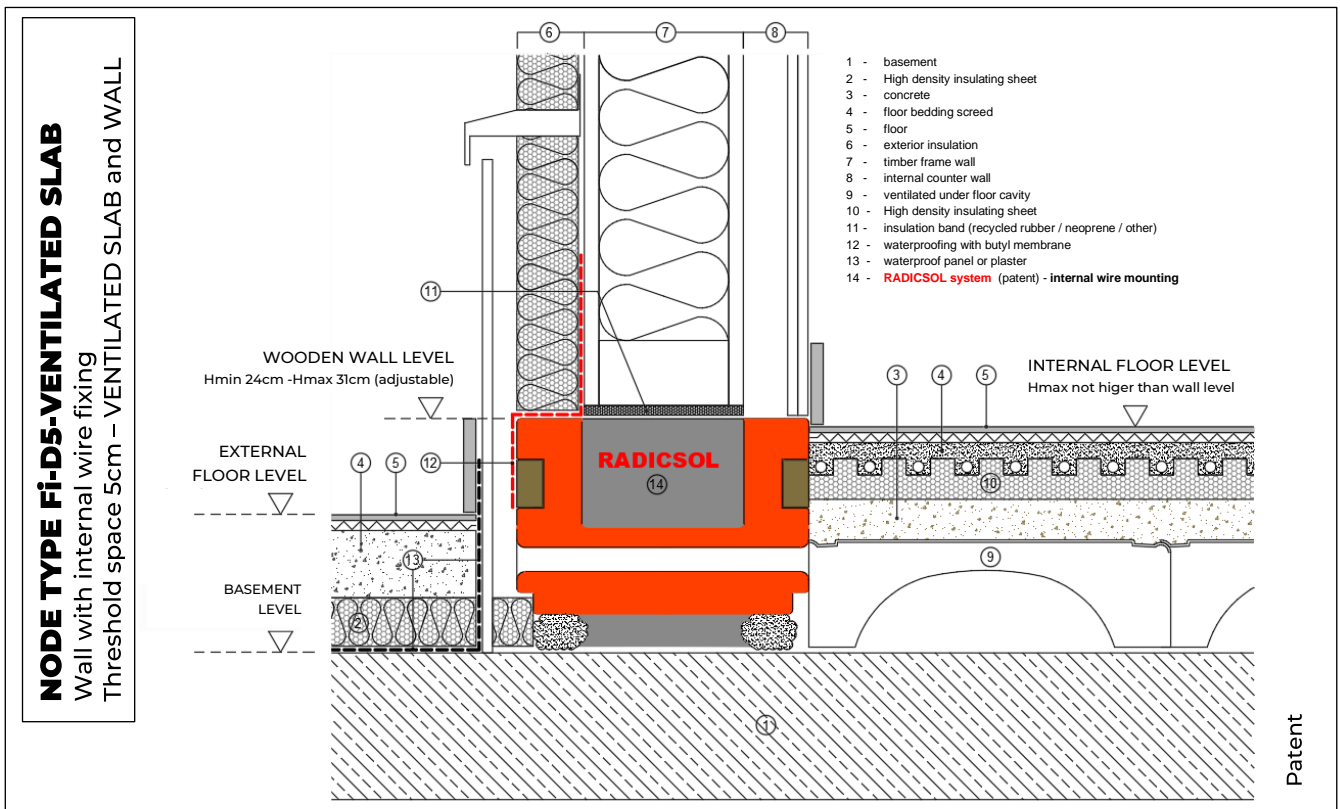


RADICSOL 140 CON XLAM cm 10 SU PLATEA PIANA – PARETI INTERNE <30cm:

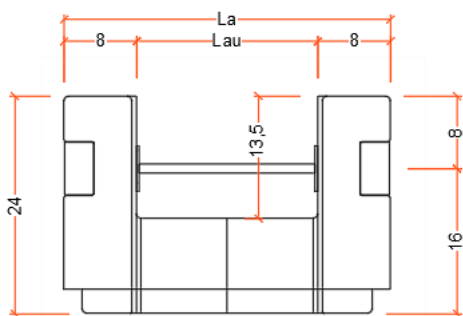


For internal walls with thicknesses of less than 30cm (including counter walls) it is necessary to cut the formwork edge after casting to perform the screeds until concrete curb.

By using the transverse holes, it is possible to realize VENTILATED SLAB and WALL:



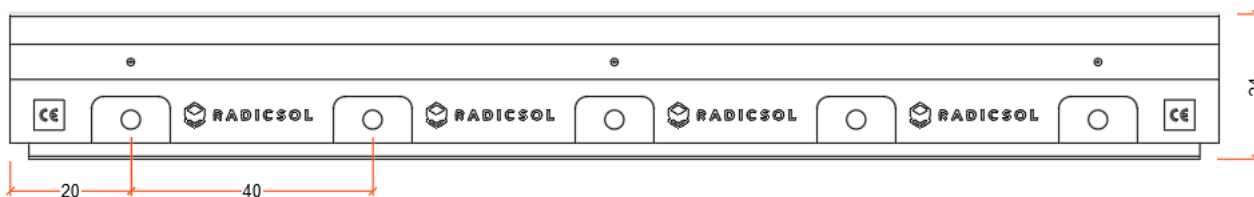
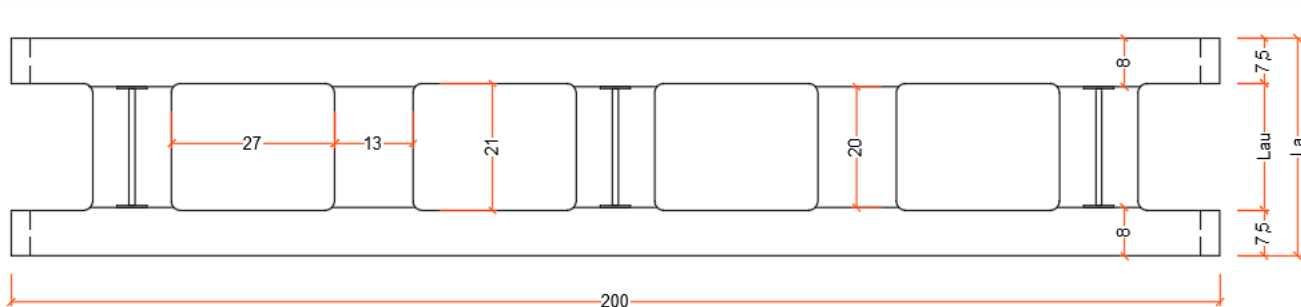
SOLUTION SUITABLE FOR HOT AND HUMID CLIMATES for the ventilation of the slab and the ventilation of the external wall foot protecting it from splashes and degradation thanks to external counter wall made with waterproofing panel.



MISURE DISPONIBILI - AVAILABLE DIMENSIONS

RADICSOL 140/80	- Lau 14	- La 30
RADICSOL 170/80	- Lau 17	- La 33
RADICSOL 200/80	- Lau 20	- La 36
RADICSOL 230/80	- Lau 23	- La 39 *
RADICSOL 250/80	- Lau 25	- La 41
RADICSOL 280/80	- Lau 28	- La 44
RADICSOL 300/80	- Lau 30	- La 46 *
RADICSOL 350/80	- Lau 35	- La 51 *
RADICSOL 400/80	- Lau 40	- La 56

* misure speciali a richiesta - on demand dimensions



FORMWORK BODY:

misure in cm

EPS CS200 - $\lambda_d = 0,033 \text{ W}/(\text{mK})$ - UNI EN 13163 - 2017

Gusci stampati a celle chiuse

MINIMUM CONCRETE FILLING VOLUME (without height adjustment = H 24cm):

RADICSOL 140 - approximately 0,033 mc/ml

RADICSOL 170 - approximately 0,040 mc/ml

RADICSOL 200 - approximately 0,046 mc/ml

RADICSOL 230 - approximately 0,054 mc/ml

RADICSOL 250 - approximately 0,057 mc/ml

RADICSOL 280 - approximately 0,064 mc/ml

RADICSOL 300 - approximately 0,068 mc/ml

RADICSOL 400 - approximately 0,090 mc/ml

GALLERY







www.radicsol.it



RADICSOL S.r.l. - headquarters and factory - Via Cerrani, 7 - 66010 PRETORO (CH) - IT

TEL +39 0871 535243 - CF e P.Iva: 02632110694 - info@radicsol.it