OPERATIVE ASSEMBLY MANUAL

ISOTEX,

THE CONSTRUCTION SYSTEM THAT COMBINES QUALITY, SAFETY, SPEED OF INSTALLATION AND COST REDUCTION

ISOTEX®
Wood-cement blocks and floor slabs

EUROPEAN LEADER
FOR OVER 30 YEARS

ISOTEX®

Wood-cement blocks and floor slabs

THE CONSTRUCTION SYSTEM WHICH MARRIES REINFORCED CONCRETE, THE MOST SOLID STRUCTURE, WITH MINERALIZED WOOD, A NATURAL MATERIAL FROM A THOUSAND RESOURCES.

The Isotex establishment

In 1985, ISOTEX started to produce and market wood-concrete blocks in Italy, after this construction system had been already used in Germany since 1946.

From that day on, some 400.000 dwellings have been built with ISOTEX all over Europe, of which some 80.000 in Italy alone, meeting with the approval of specialists, builders and end users.

1976

The Nurnberg Building

1985

The residential district of Fidenza (PR)

2004

The Capo Coda Cavallo Hotel Project (NU)

2019

Multi-floor buildings in Bologna

CONTENTS

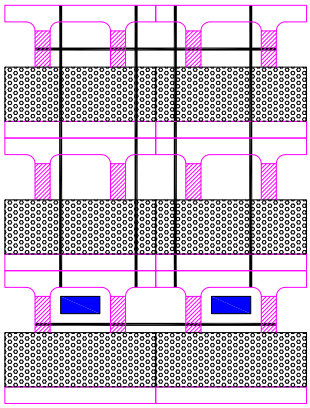
- Correct transfer of blocks and floor slabs from the vehicle to the ground..... 2-3
  - Transfer of block pallets 2
  - Transfer of floor slabs 3
- Block Types and tolerances 4-6
  - Standard blocks (NS) 4
  - Special blocks and complementary blocks 5
  - Dimensions, tolerances and cutting of blocks 6
- Method for requesting/ordering blocks 7
- Correct laying of blocks - Perimeter walls 8-17
  - Correct location of the reinforcement steel bars 8
  - Correct laying of the first course 9
  - Correct laying of subsequent courses (external view) 10-11-12
  - Correct laying of CORREA block for floor slabs laying (external view) 13
  - Correct laying of subsequent courses (external view) 14-15-16
  - Correct laying of CORREA block and lintel for doors and windows (internal view) 17
- Correct laying of blocks - Internal walls 18-19
  - 3-4 way junction 18
  - SHOULDER realization 19
- Construction Particular 20-21
  - Lintels, shoulders and internal walls 20
  - Block cutting for rebates 21
- Procedure for pouring concrete 22
- Elimination of thermal bridges 23-27
  - Floor bond beam 23
  - Balconies 24
  - Eeaves section 25
  - Pillar block or traditional pillar connector 26
  - Optimization of Acoustic performance 27
- How to make channels in Isotex walls 28
- Example of an assembly floor plan 29-33
  - Example of assembly scheme for Isotex floor 29-30
  - Isotex floor slabs range 31
  - Correct laying of Isotex floor slabs 32-33
- Recommendation for correct application of plasters e and traction test..... 34-35
- Certificates 36

CORRECT TRANSFER OF PACKS FROM THE VEHICLE TO THE GROUND

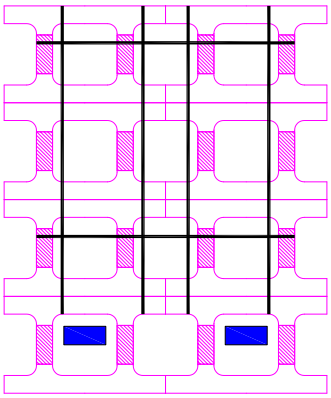
1. The packs are transferred one at a time, using equipment and procedures in full compliance with current applicable Standards on safety;
2. The packs are moved by insertion of the appropriate equipment into the first row of blocks through the whole depth of the pack itself (see figure);
3. The movement is carried out while avoiding brusque and sudden displacements;
4. The packs are rested on the ground, on a flat surface without changes of level or roughness;
5. Do not stack more than 2 packs on the ground;
6. Movement of packs on the ground within the yard must comply with the safety provisions of Legislative Decree 81/2008 - Heading IV;
7. Before moving the packs, check that the supports are in good condition.

CORRECT POSITION FOR UNLOADING

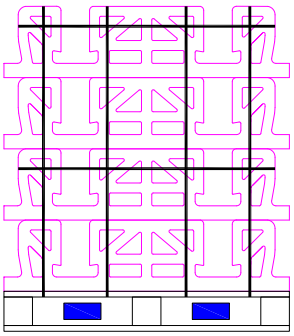
PACK OF "HDIII WITH INSULATOR" BLOCKS



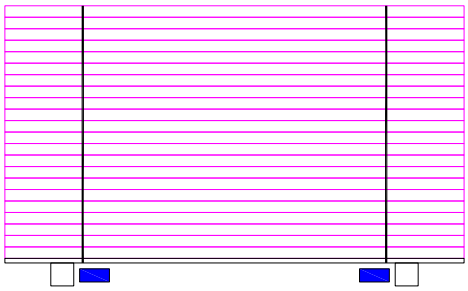
PACK OF "HB/HD WITHOUT INSULATOR" BLOCKS



PACK OF BLOCKS ON PALLET "CORNER BLOCK - ANGLED AS REQUIRED - FLOORING PANEL ELEMENTS"



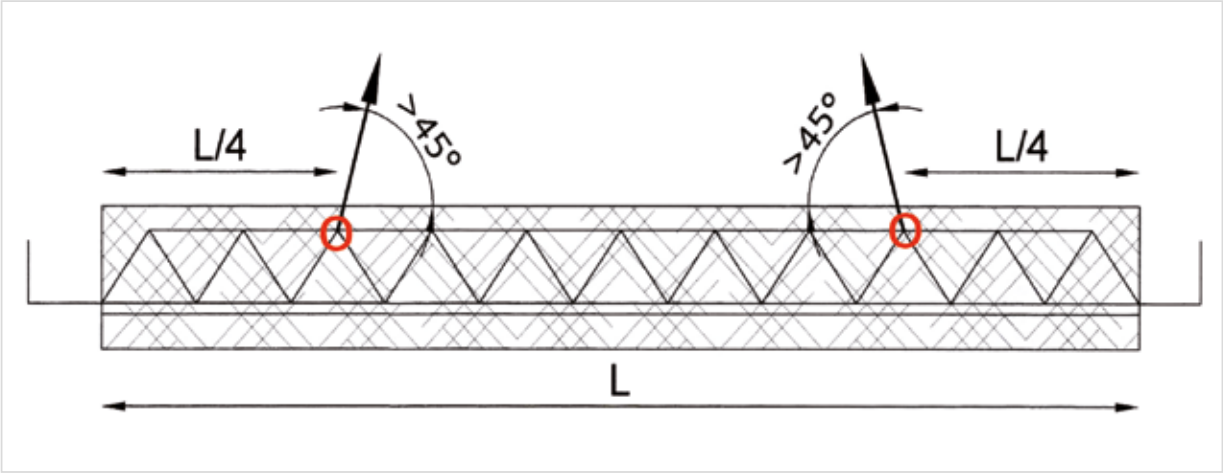
PACK OF PANELS



MOVEMENT OF FLOOR SLABS

The lifting points of flooring panels are identified in red on the panels themselves, and lifting must be carried out with four chains of suitable length (as in the illustration).

Movement operations must always comply with current applicable safety Standards.



STANDARD BLOCKS (NS)

Block HB 20

Block HB 25/16

Block HB 30/19

Block HB 44/15 - 2

Block HDIII 30/7 graphite
(BASF-NEOPOR®)

Block HDIII 33/10 graphite
(BASF-NEOPOR®)

Block HDIII 38/14 cork

Block HDIII 38/14 graphite
(BASF-NEOPOR®)

Block HDIII 44/20 graphite
(BASF-NEOPOR®)

SPECIAL BLOCKS AND COMPLEMENTARY BLOCKS

PASS block of 30 - 33 - 38 - 44 cm

Shoulder block of 38 - 44 cm

Universal block (UNI)
of 38-44 cm for external corners

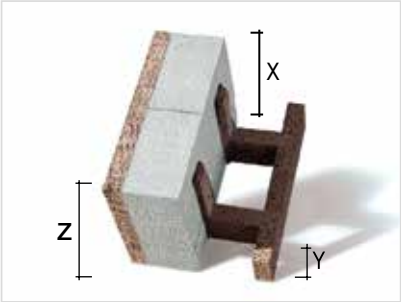
Universal block (UNI) of 30-33 cm
for external corners and shoulders

Block for internal corners
of 30-33-38-44 cm

Wall pillar block of
33 cm section CLS 25x38 cm
*38 cm section CLS 30x38 cm
*44 cm section CLS 33x39 cm
***Possibility of inserting 5 cm insulator**
****Possibility of inserting 8 cm insulator**

Half block shoulder of 44 cm

Block with angle at will
of 25-30-33-38-44 cm
(special blocks)



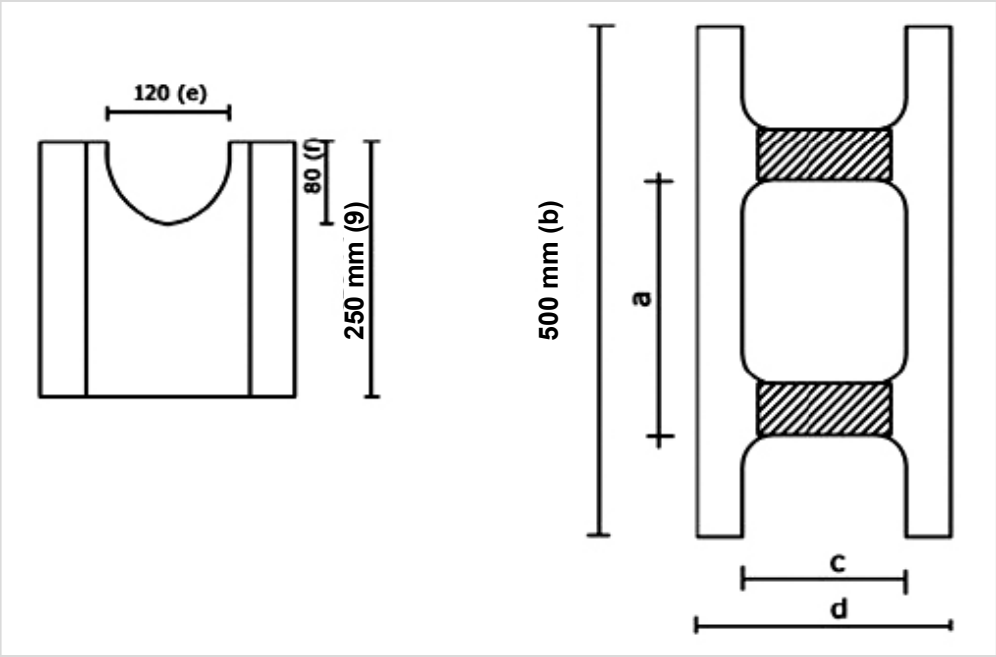
Correa slab block
x = as required
y = as required
z = x + y
(special blocks)

BLOCK DIMENSIONS AND TOLERANCES

PLEASE NOTE: all Isotex blocks are 500 mm length and 250 mm high. 1 square meter corresponds to 8 blocks

Length (b) and width (d) ± 5mm
Height (G) ± 2 mm

Holes for concrete + 5 mm/ -2 mm
Horizontal lunettes (e-f) + 10 mm/ -3 mm



CUTTING OF BLOCKS

The blocks are easily cut using the following devices which will attach as utensils to the Widia tool:

a. Multifunction saw;
b. Band saw;
c. Electric chain saw;
d. Other appropriate equipment.

a.

b.

c.

METHOD FOR REQUESTING MATERIAL

- Applications for material must be forwarded by fax or e-mail at least 5 working days before the consignment date.
- Un an articulated lorry carries 52 packs
- A lorry carries 24 packs

BLOCKS WITHIN A PACK

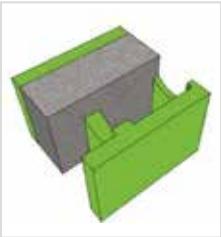
- **QUANTITY (in m²) OF BLOCKS WITHIN A PACK:**

- 1 pack of 20 cm blocks measures 6 m²
- 1 pack of 25 cm blocks measures 5 m²
- 1 pack of 30 cm blocks measures 4 m²
- 1 pack of 33 cm blocks measures 4 m²
- 1 pack of 38 cm blocks measures 3 m²
- 1 pack of 44 cm blocks measures 3 m²

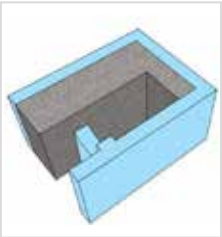
BLOCK PALLETS

- **PACKS OF BLOCKS ARE SUPPORTED ON:**

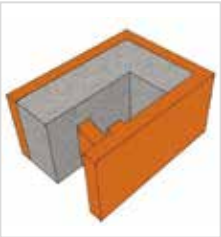
PASS blocks (length 45-42-37-31 cm) = green supports



SHOULDER blocks (for doors and windows) = blue supports



UNI blocks (for corners) = orange support



NS (standard) blocks = black supports

Please note: NS (normal) blocks of 33 cm = white or white/black supports

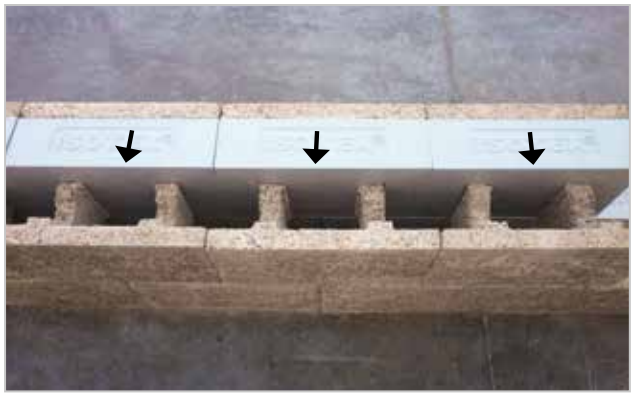
SLABS ON ARTICULATED LORRY

- **ON AVERAGE, AN ARTICULATED LORRY CAN TRANSPORT:**

- S20 SLAB = 170 ÷ 180 m²
- S25 SLAB = 160 ÷ 170 m²
- S25 + 5 SLAB = 140 ÷ 150 m²
- S39 SLAB = 110 ÷ 120 m²

QUALITY CONTROL WHILE WORKING FOR THE LOCATION OF THE REINFORCEMENT

Location of the individual horizontal bars:
Rest the individual horizontal bars in the lunettes with spacers at every course of blocks. Overlapping must be 50% greater than that required by current applicable technical Standards.



Location of the vertical bars:
Position the vertical bar into the central position of the pillar, aligned with the vertical mark inscribed on the polystyrene, which operation is carried out at the same time as pouring the concrete. The above note on overlapping is also valid in this case.

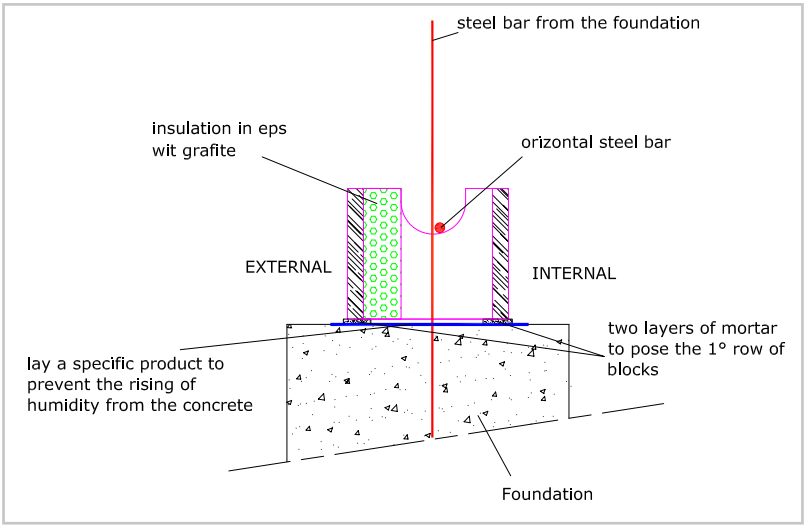
Location of the horizontal bars:
In the event that double horizontal bars should be required, locate the same in the lunettes with distancers, fixed to the blocks with screws. The above note on overlapping is also valid in this case.

CORRECT LAYING OF THE FIRST COURSE

While laying the foundations, insertion of the vertical reinforcement should be taken into account with a width of 25 cm (the width of the hole in blocks).

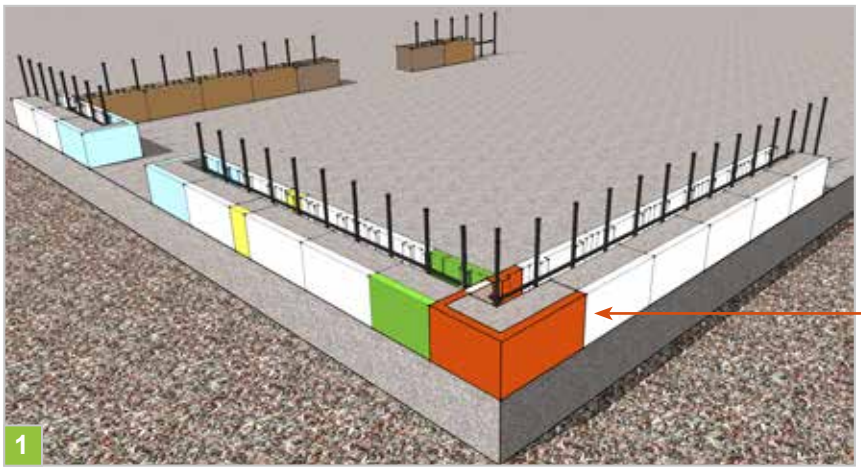
The anchoring length conforming with technical standards must be indicated by the designer. The other possibility, once the foundation has been laid, is the insertion of this vertical reinforcement with resin on the first course of blocks laid (on the indication of the structure's designer).

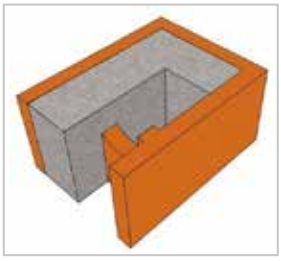
Laying of the first course is carried out onto two layers of mortar positioned only in correspondence with the walls of the blocks in order to achieve a good level (use of a spirit level is advised). A layer of mortar over the whole width of the block is to be avoided. The mortar has a much lower resistance to compression to that of the concrete Rck ≥ 30 N/mm². Position the corners with a plumb line and stretch the line between them. While laying the blocks, it is important to keep to the distance from the line to guarantee not straying from the vertical, the horizontal line of the courses and levelness.



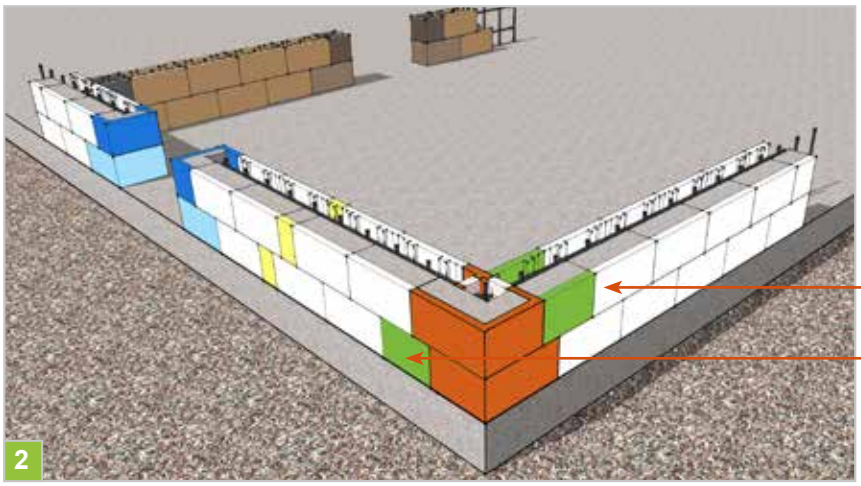
CORRECT LAYING OF SUBSEQUENT COURSES

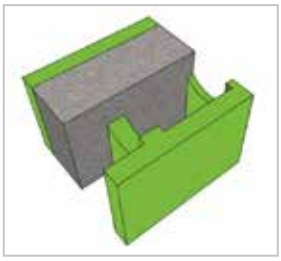
Arranged well at the level of the first course, starting from the corner blocks (UNI), we proceed with the laying of the subsequent courses completely dry having the foresight to keep the blocks tightly closed to avoid thermal and acoustic bridges. In this way, given the precision of the blocks, the use of insulating foams is avoided which ISOTEX does not recommend the use of.



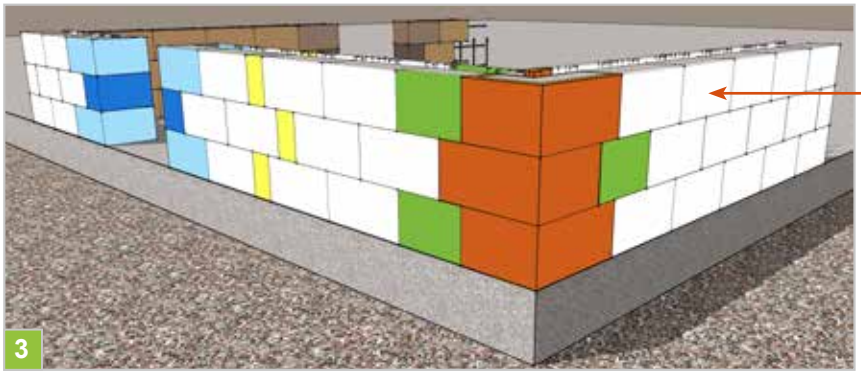


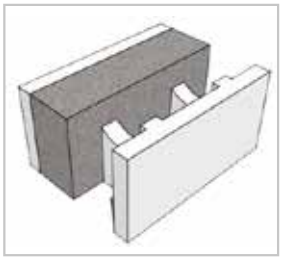
UNI Block (corner)





PASS Block





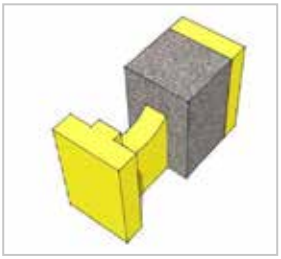
NS Block (Standard)

CORRECT LAYING OF SUBSEQUENT COURSES

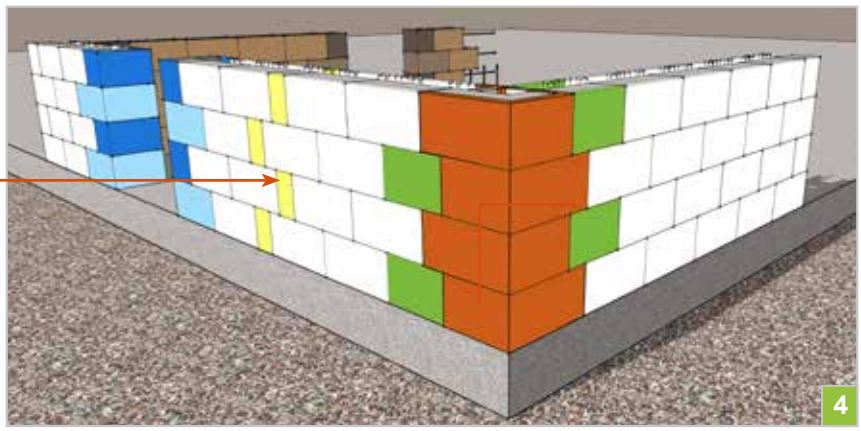
It is very important to stagger subsequent courses by half a block, using the special pieces in order to obtain the maximum volume to concrete within the forms, as is necessary to achieve the wall's load bearing capacity.

The blocks are always laid with the lunettes facing upwards, for connection of the reinforcement and the concrete. The parts with insulation towards the outside (see the illustration on page 15) and any necessary cut to the block for building the wall to the design measurements, is done at the centre of the wall. The cut is kept in the same position over subsequent courses to avoid staggering of the pillars within the blocks, with the consequent reduction of load bearing and the difficulty of filling the forms with concrete.

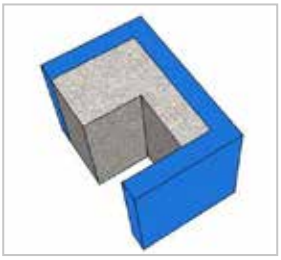
The horizontal reinforcement will be inserted into the appropriate block lunettes at every course, taking care to safeguard the reinforcement cover (see the photo on page 11).



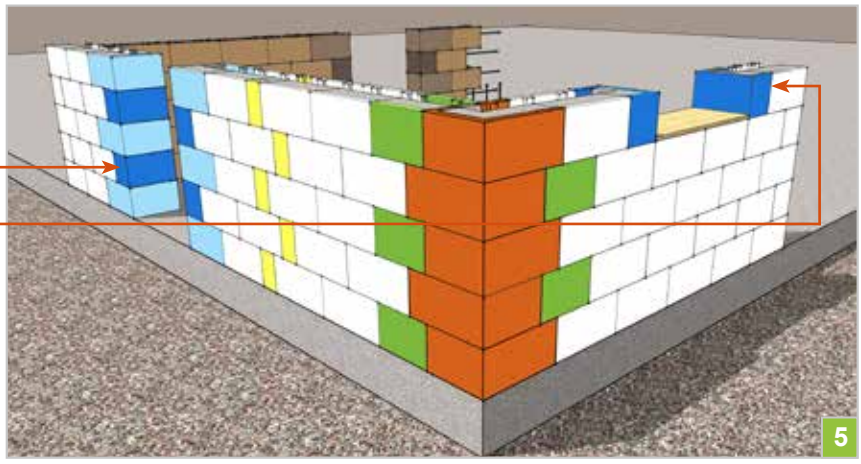
NS Block to be cut to correct size on building site



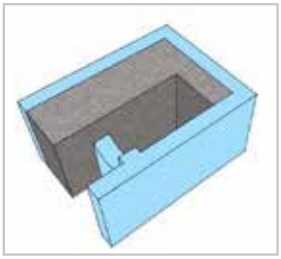
4



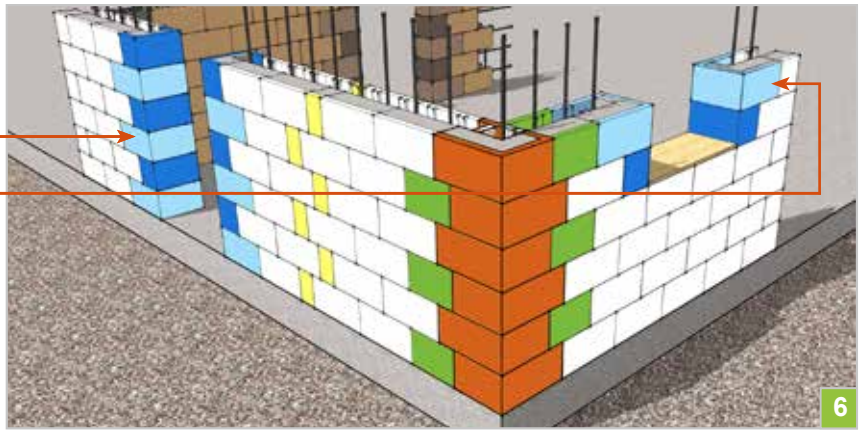
Half SHOULDER Block to be cut on building site



5

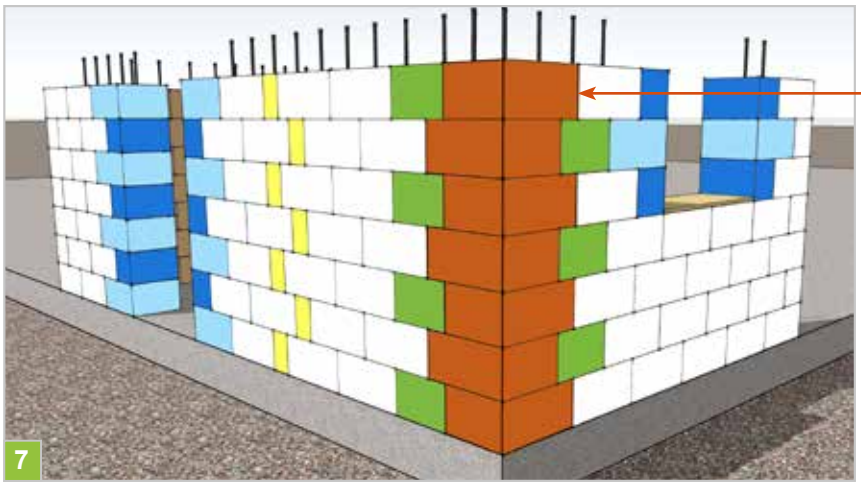


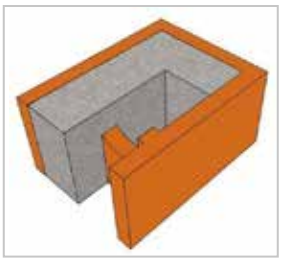
SHOULDER Block



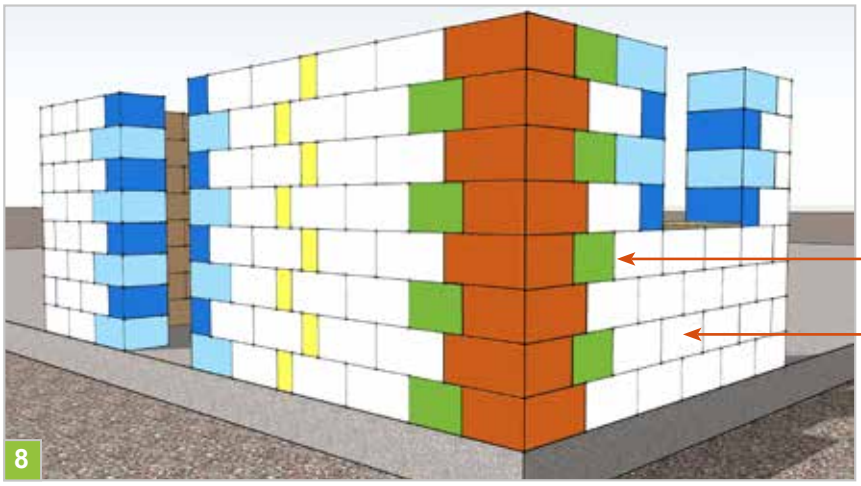
6

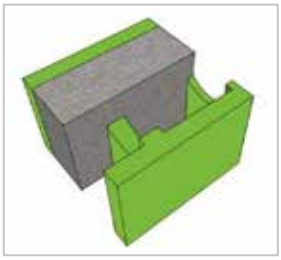
CORRECT LAYING OF SUBSEQUENT COURSES



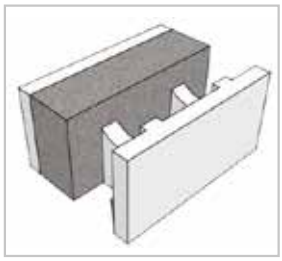


UNI Block (corner)

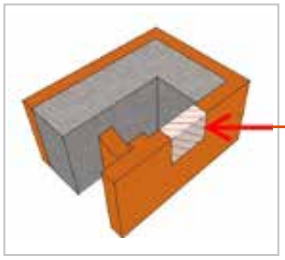




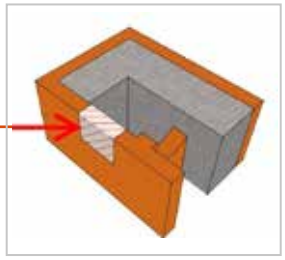
PASS Block



NS Block (Standard)



Course corners
1-3-5-7-9

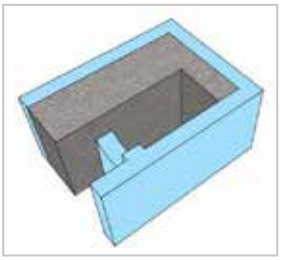


Course corners
2-4-6-8-10

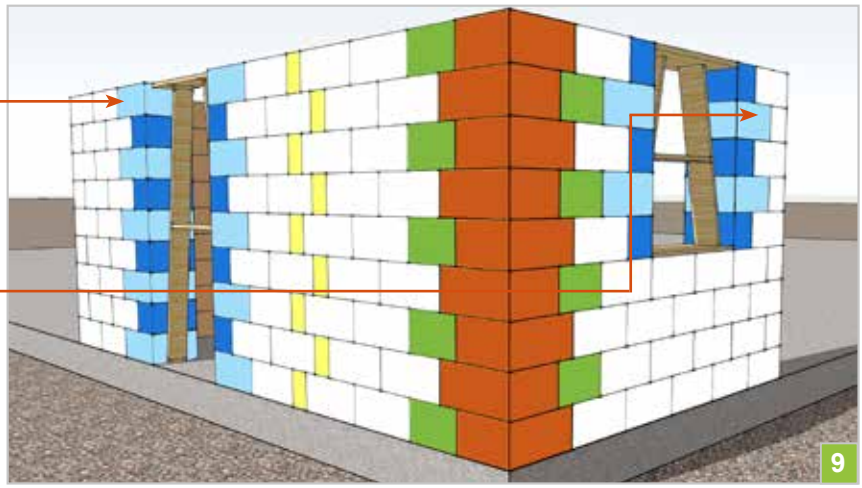
CORNER BLOCKS: the cutting of the lunettes is performed for the connection of the reinforcement steel bars and concrete

CORRECT LAYING OF CORREA BLOCK FOR FLOOR SLABS LAYING

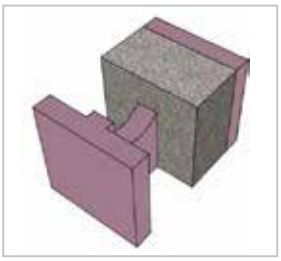
The door and window frames are formed by alternating SHOULDER blocks while laying the blocks. Door and window lintels are made by cutting the SHOULDER blocks at the yard (of 30 and 38 cm) or the laying of 44 cm blocks. In this manner, thermal bridges are eliminated. The lintel reinforcement must by indicated by the structure designer.



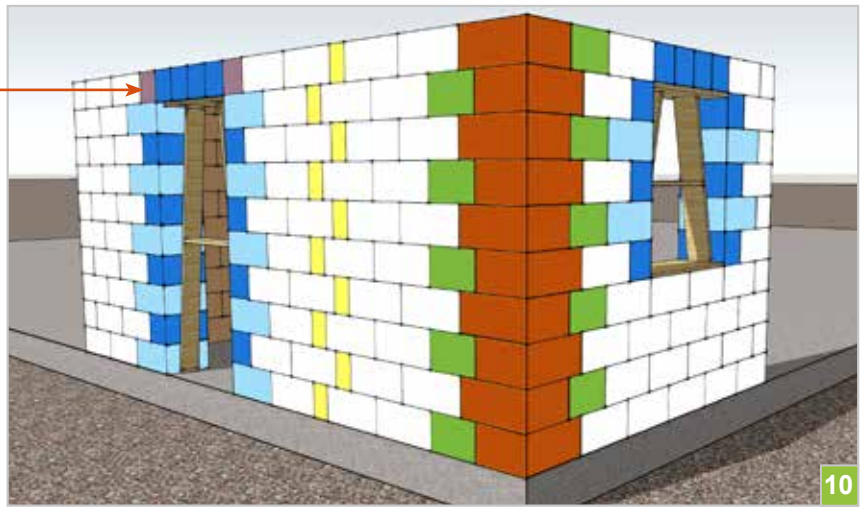
Shoulder Block



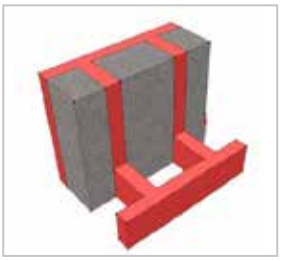
9



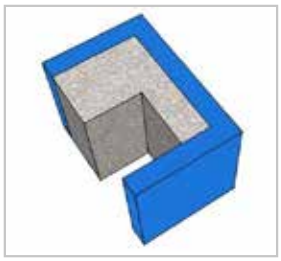
Half NS Block to be cut on building site



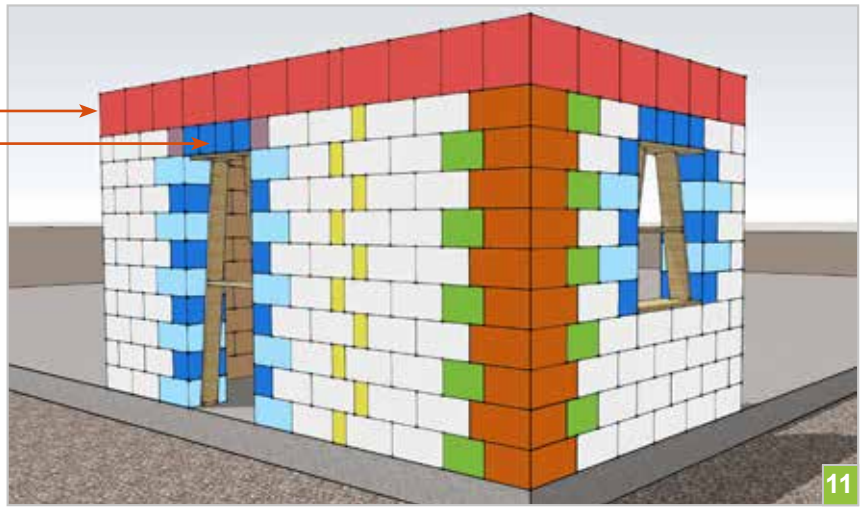
10



Correa Block

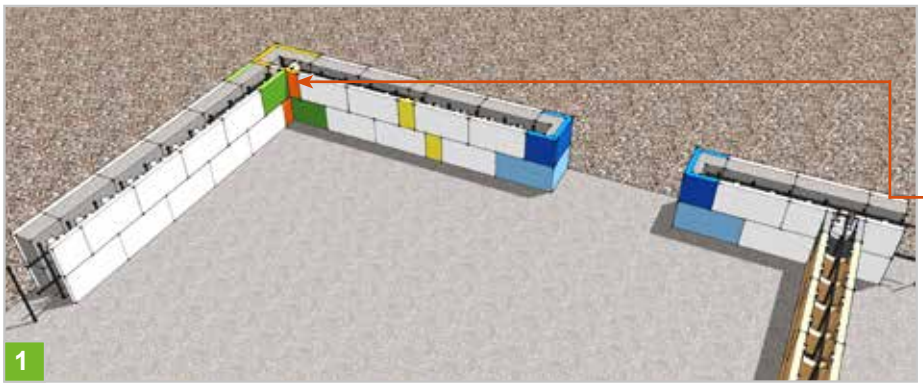


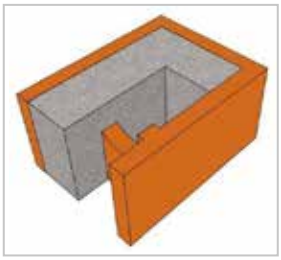
Half shoulder Block to be cut on building site



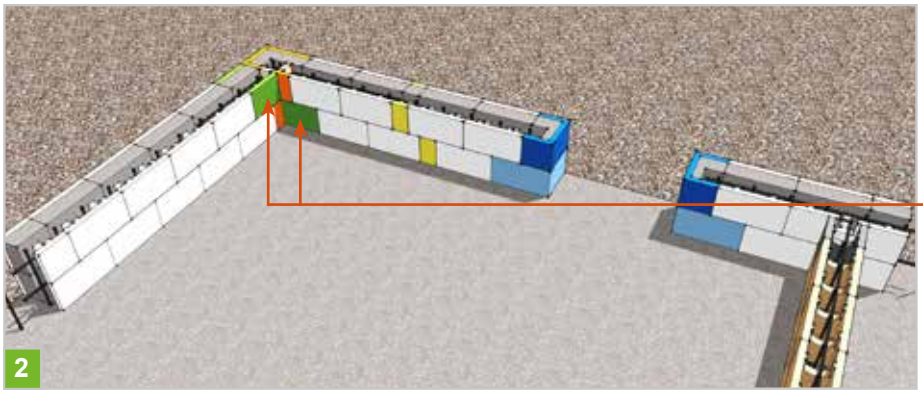
11

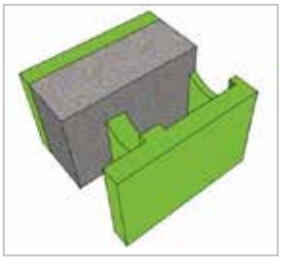
CORRECT LAYING OF SUBSEQUENT COURSES (INTERNAL VIEW)



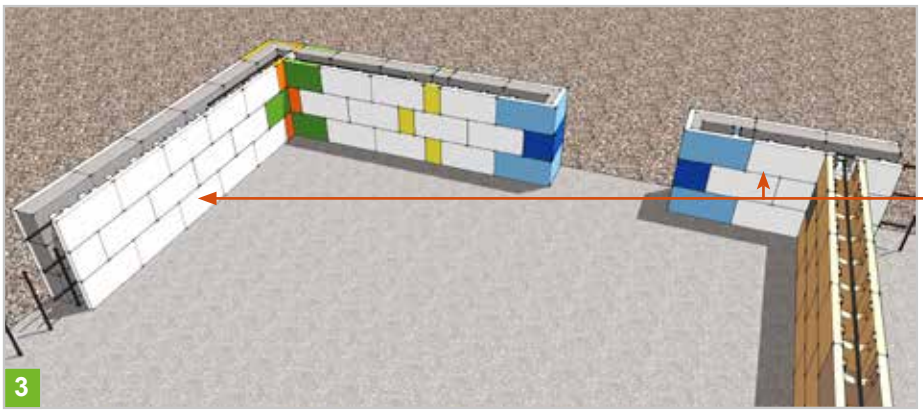


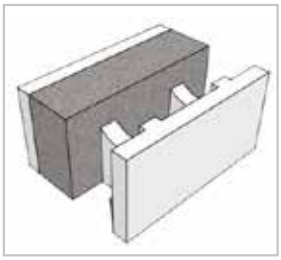
UNI Block (corner)





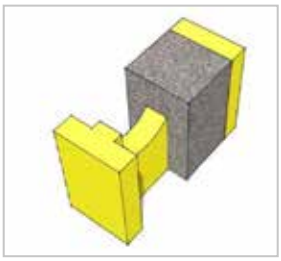
PASS Block



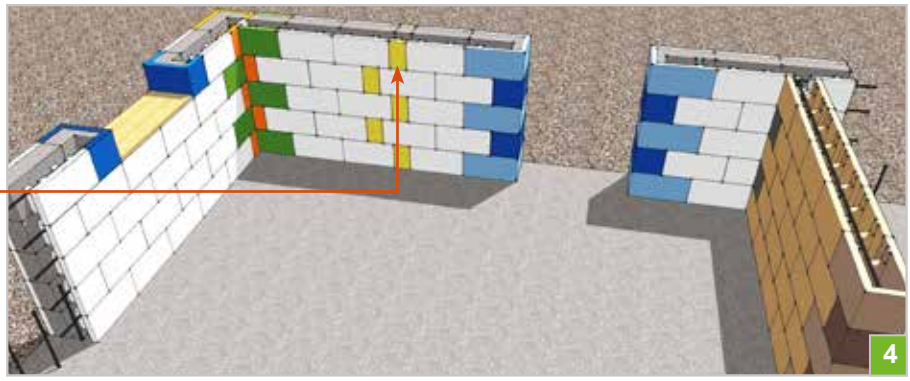


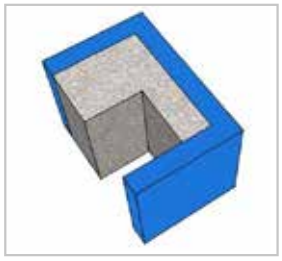
NS Block (Standard)

CORRECT LAYING OF SUBSEQUENT COURSES (INTERNAL VIEW)

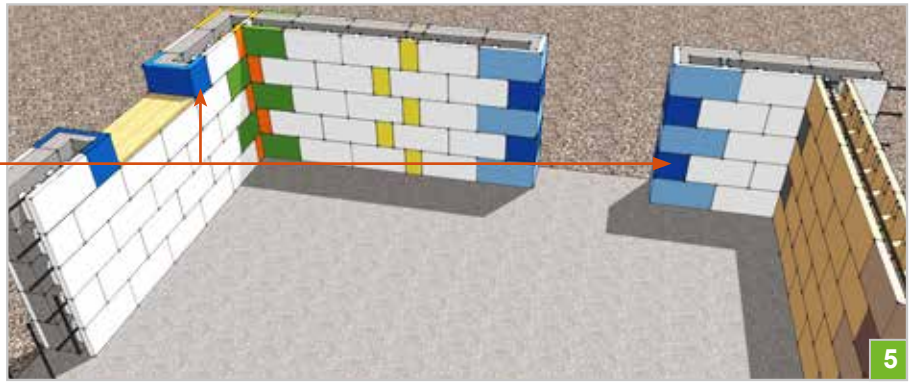


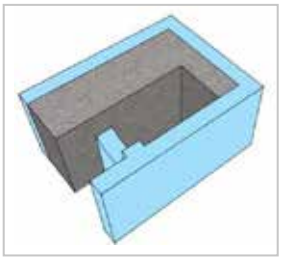
NS Block to be cut to correct size on building site



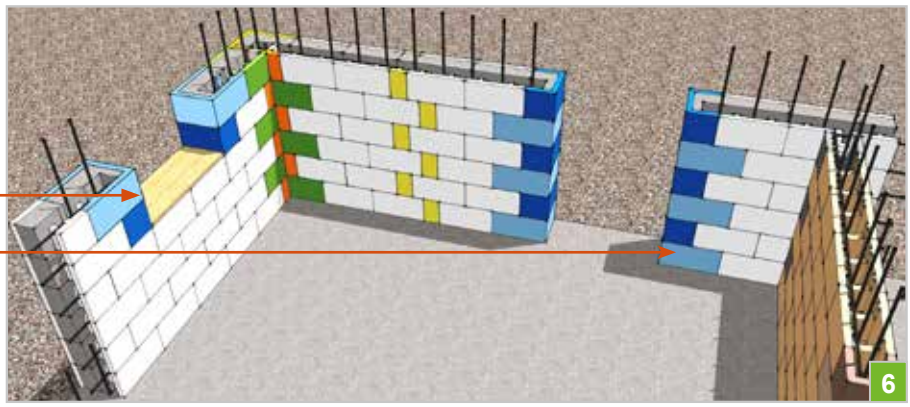


Half shoulder Block to be cut on building site

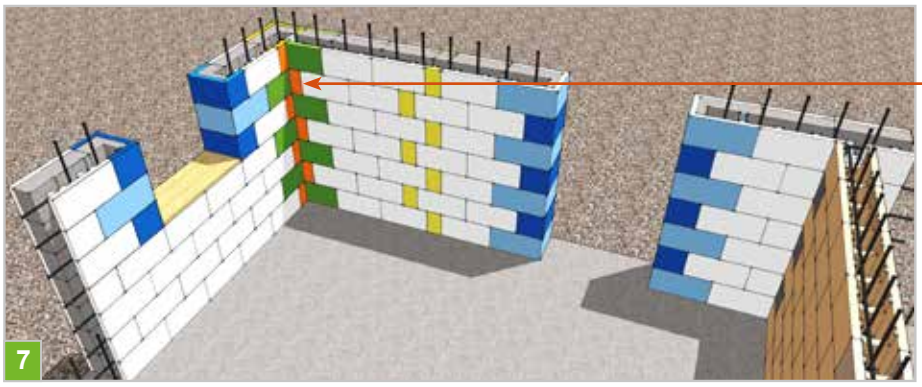


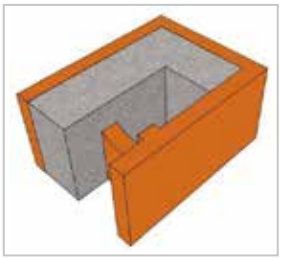


Shoulder Block

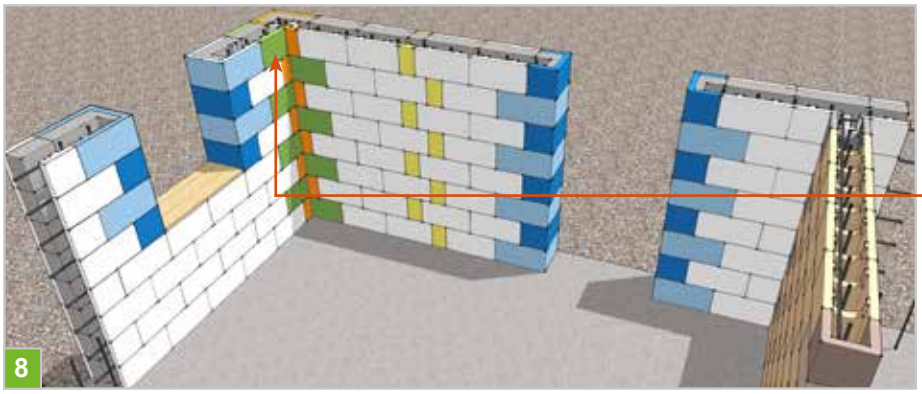


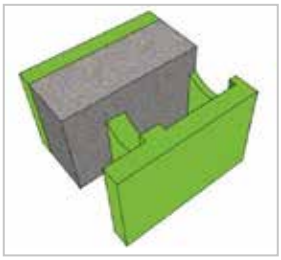
CORRECT LAYING OF SUBSEQUENT COURSES WITH OPENINGS (INTERNAL VIEW)



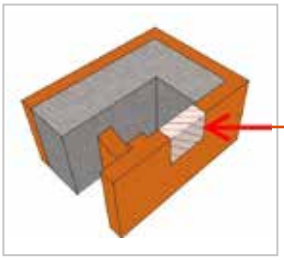


UNI Block (Corner)

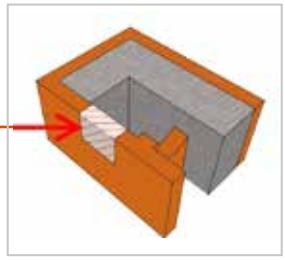




PASS Block



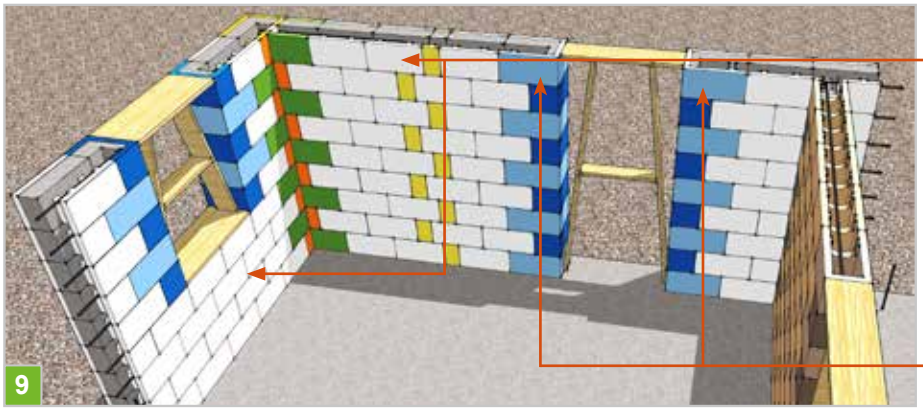
Course corners
1-3-5-7-9

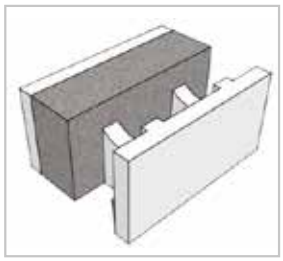


Course corners
2-4-6-8-10

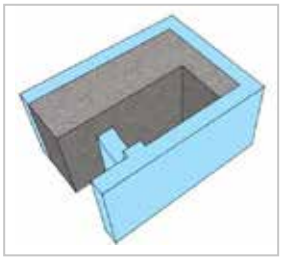
CORNER BLOCKS:
the cutting of the lunettes is performed for the connection of the reinforcement steel bars and concrete

CORRECT LAYING OF CORREA BLOCK AND LINTEL FOR DOORS AND WINDOWS (INTERNAL VIEW)

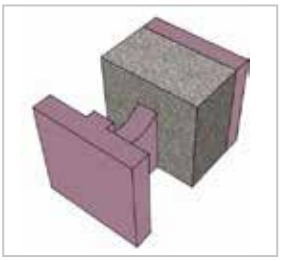




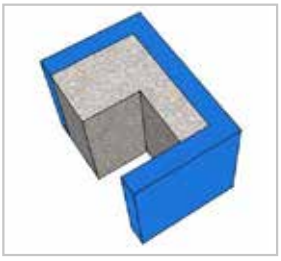
NS Block (Standard)



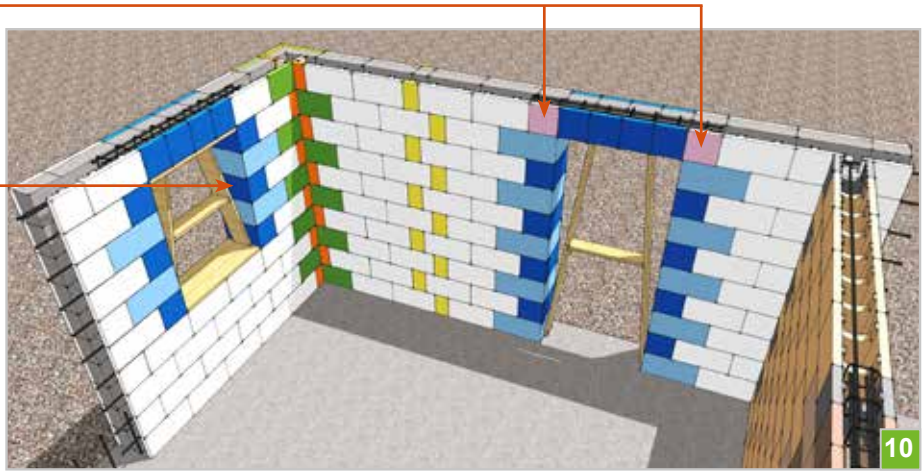
Shoulder Block

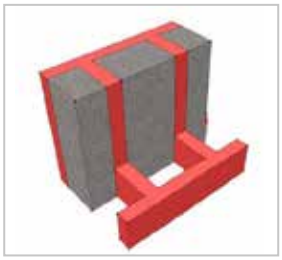


Half NS Block to be cut on building site

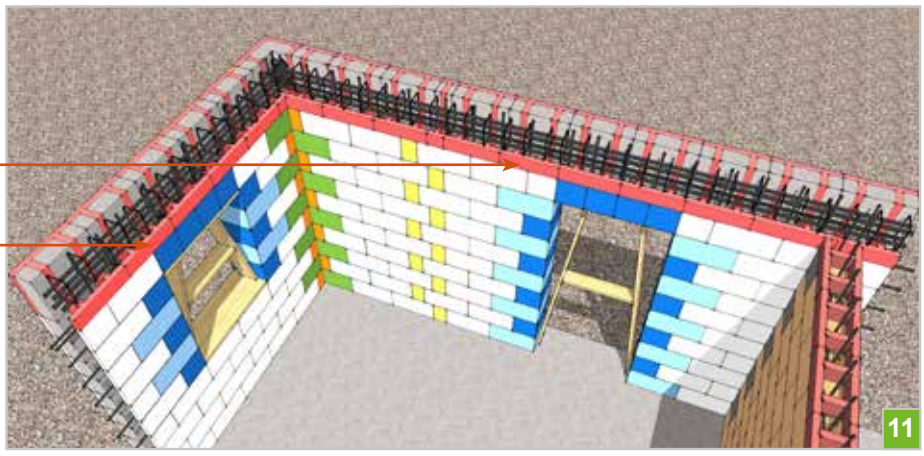


Half shoulder Block to be cut on building site



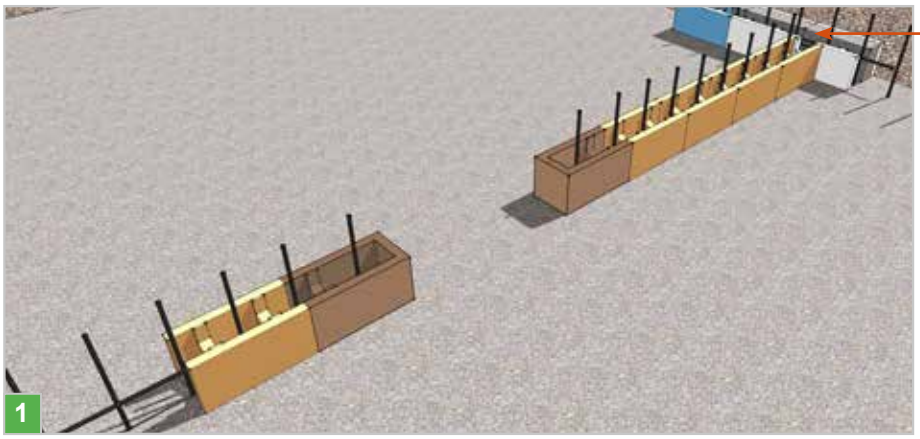


CORREA Block

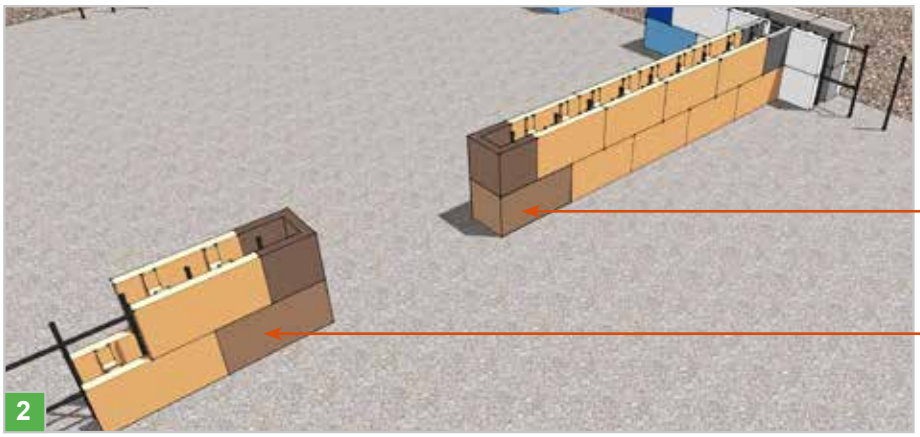


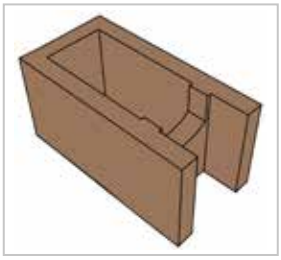
INTERNAL WALL: 3-4 WAY JUNCTION

For making three or four way nodes, proceed with laying the internal wall, arriving at abutting the external wall, creating an aperture at the point of contact with that external wall to permit the lodging and connection of the horizontal reinforcement and the concrete.

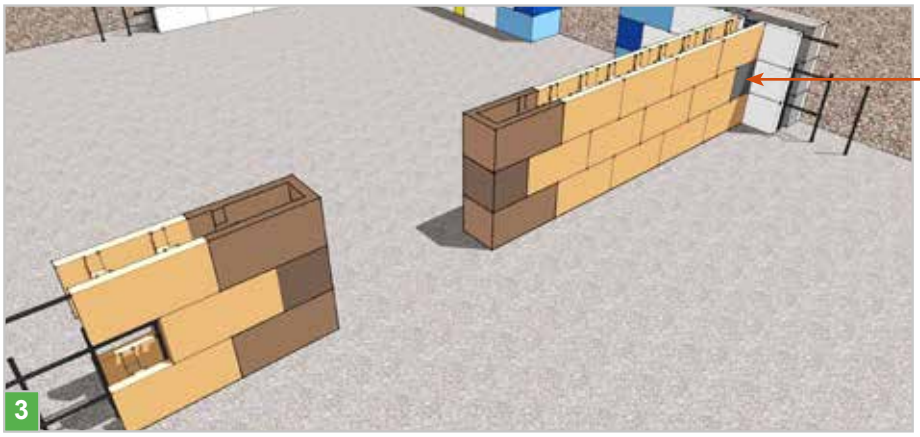


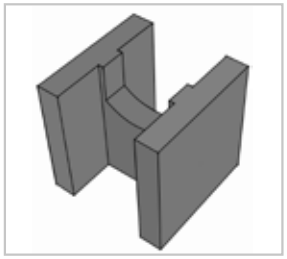
3-4 way junction





UNI Block for internal walls

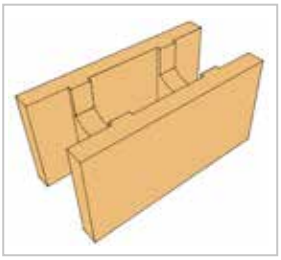




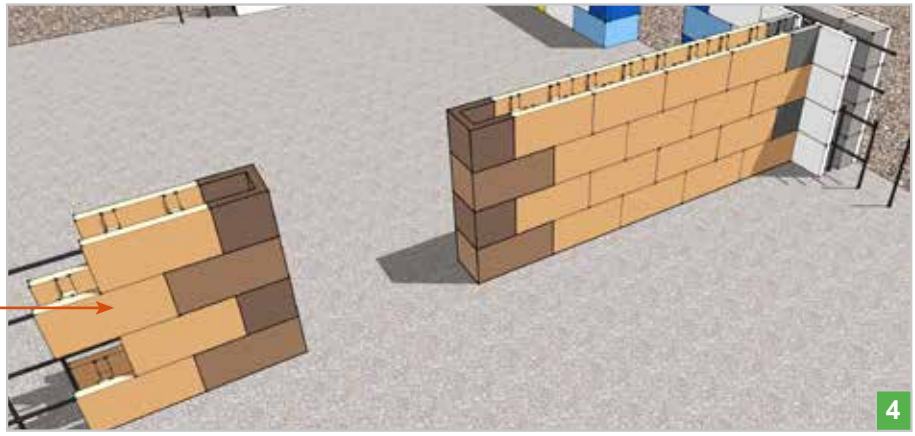
Half NS Block to be cut on building site

INTERNAL WALL: SHOULDER REALIZATION

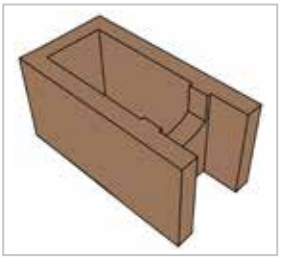
To be avoided on the other hand, as is otherwise usual with traditional blocks, are the "ties" because, with the ISOTEX system, connection between the three or four way nodes is made with the steel reinforcement and the concrete.



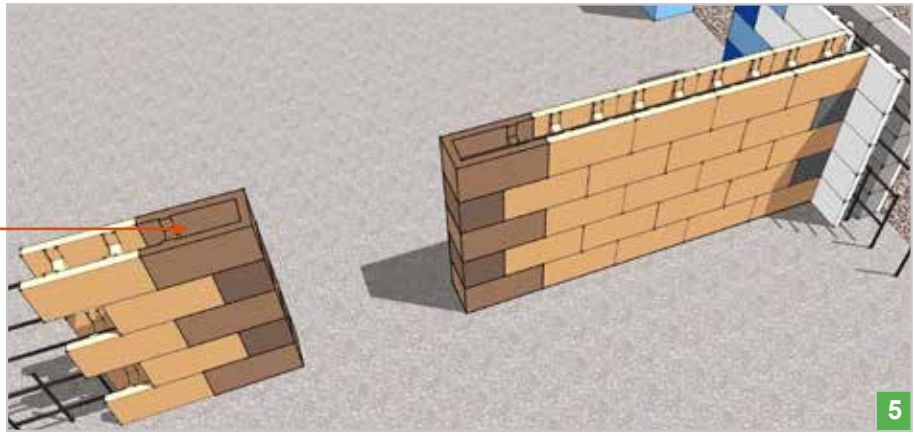
NS Block for internal walls



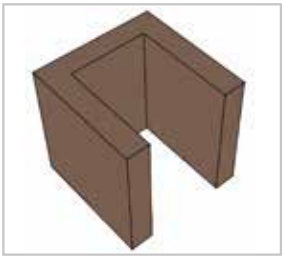
4



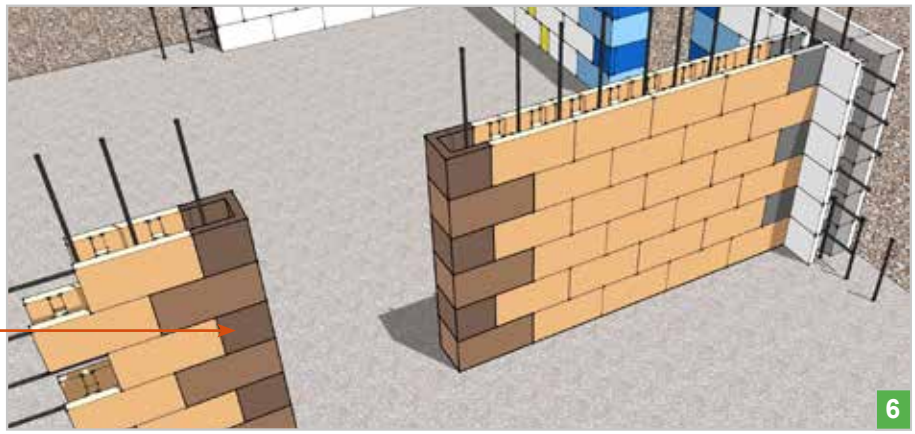
UNI Block for internal walls



5

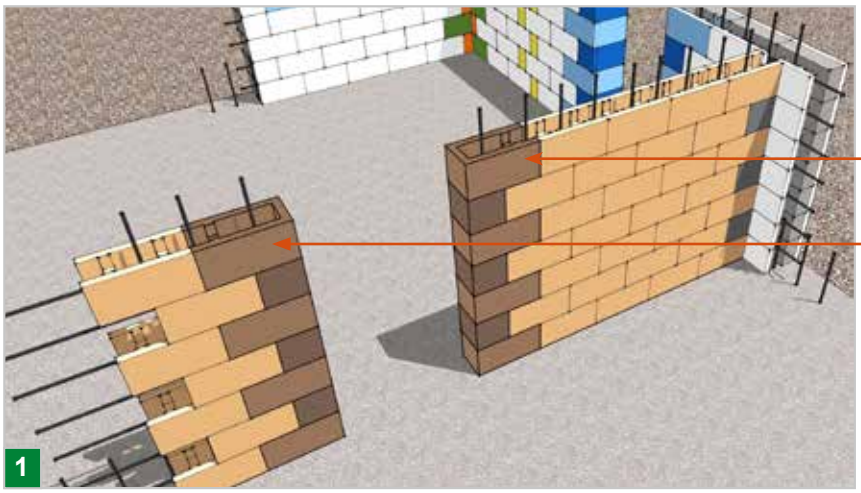


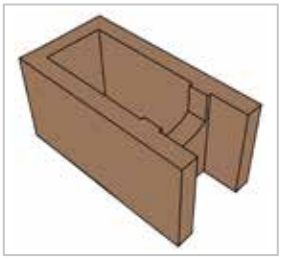
Half UNI Block to be cut on building site



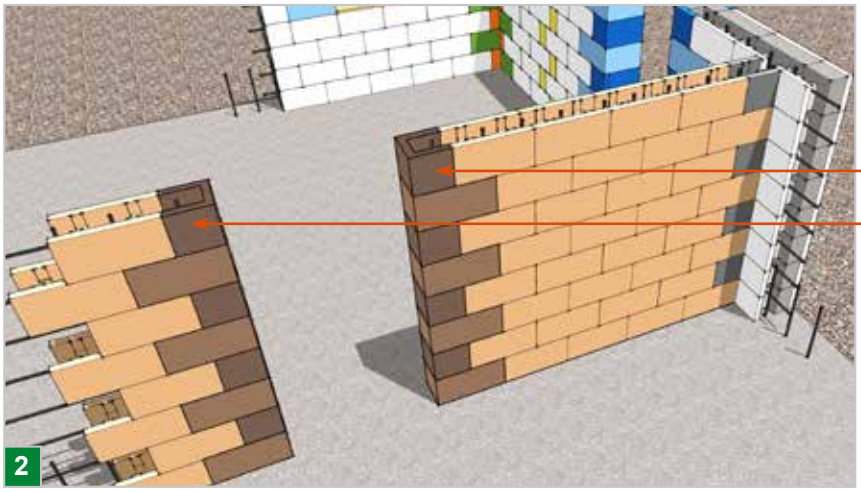
6

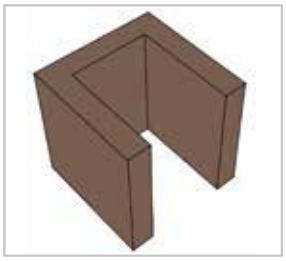
LINTELS, SHOULDERS AND INTERNAL WALLS



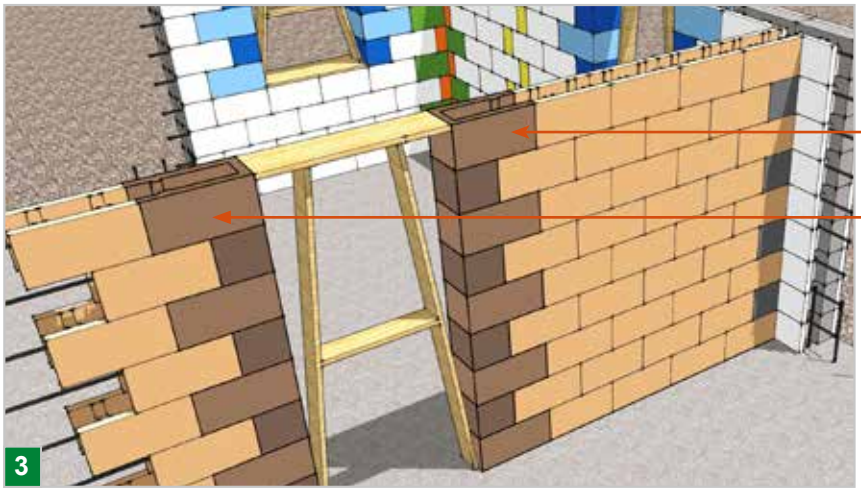


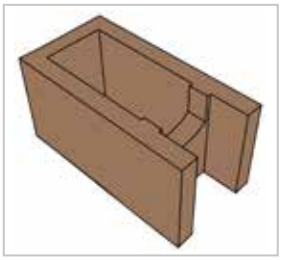
UNI Block for internal walls





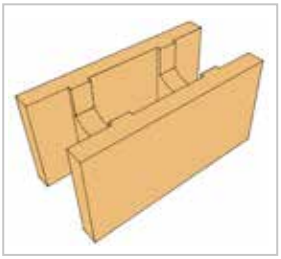
Half Block to be cut on building site



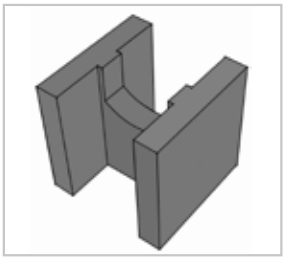


UNI Block for internal walls

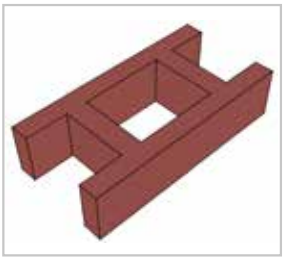
LINTELS, INTERNAL WALLS, WINDOW FRAMES AND BLOCKS TO REACH THE FLOOR



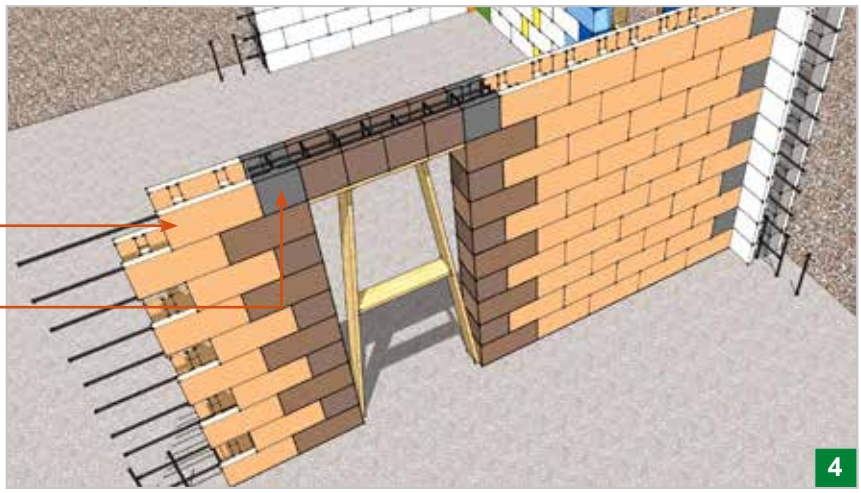
NS Block for internal walls



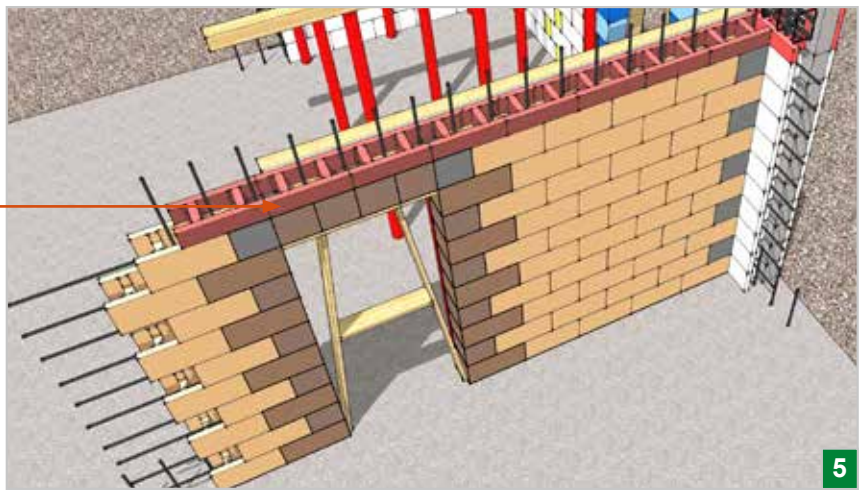
Half NS Block to be cut on building site



Block to reach the correct dimension of ceiling



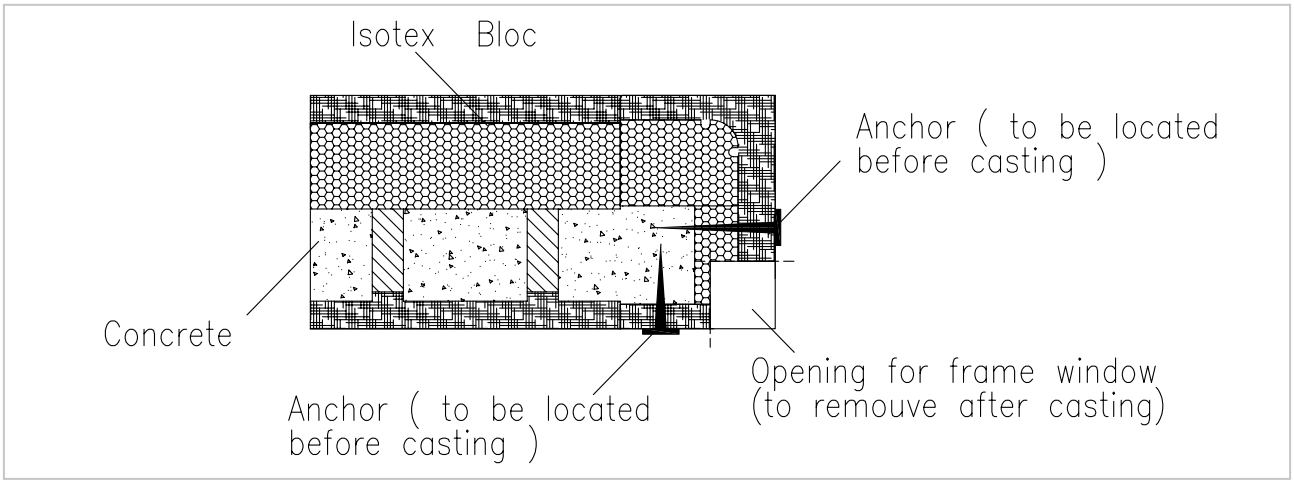
4



5

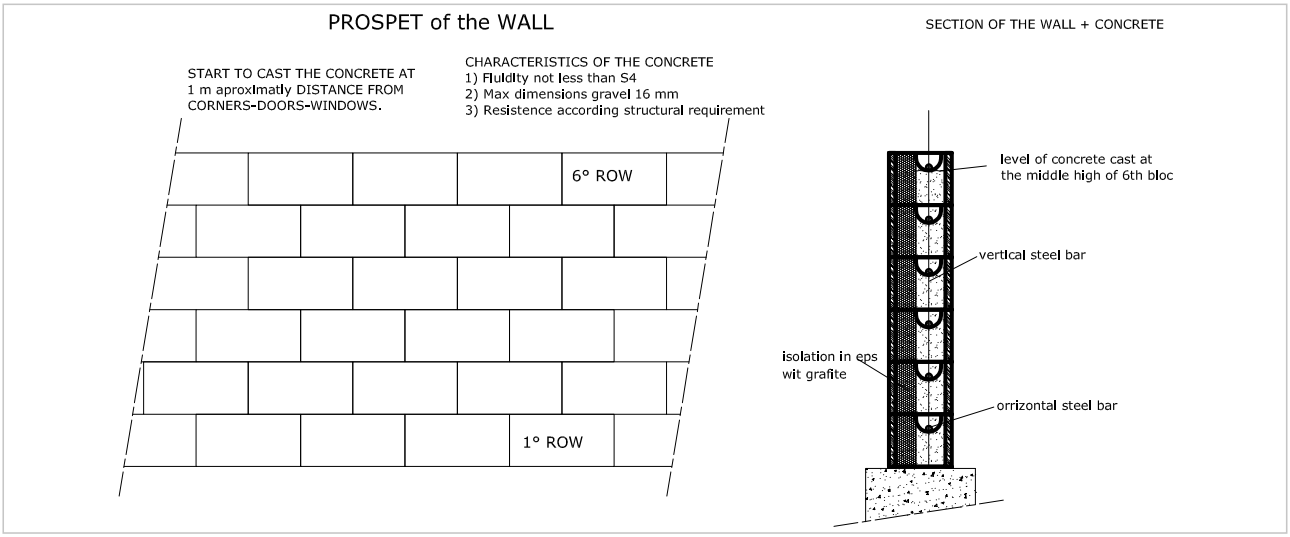
BLOCK CUTTING FOR REBATES

When rebates are required, these can be cut into the SHOULDER blocks after pouring the concrete. Plastic anchors must nevertheless must be inserted (as in the diagram) before the pour in order to avoid possible detachments while cutting. Proceed in the same manner for rebates in the lintels above doors and windows.



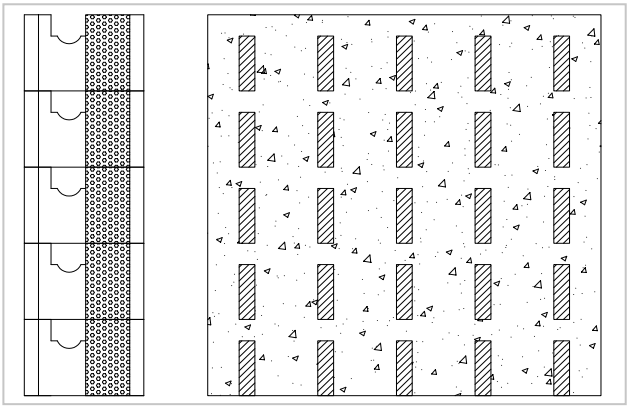
PROCEDURE FOR POURING THE CONCRETE

Having reached a height of 6 courses, equivalent to 1.5 m, complete refilling of the walls with concrete is carried out, possibly by bucket or pump, taking care not to apply excessive pressure which might shift the alignment of the blocks. The concrete must have a class of consistency (fluidity) of not less than S4 with a class of resistance taken from the calculated requirements and the granulometry of the aggregates (<16 mm), in order to ensure a complete filling of the blocks.



It is essential to start filling the perimeter walls with concrete at a distance of approximately one metre from the corners as well as the door and window shoulders, in order that the concrete, passing from the block lunettes, applies a lesser pressure and thereby does not shift the blocks. Having completed the perimeter walls, the internal walls are then filled.

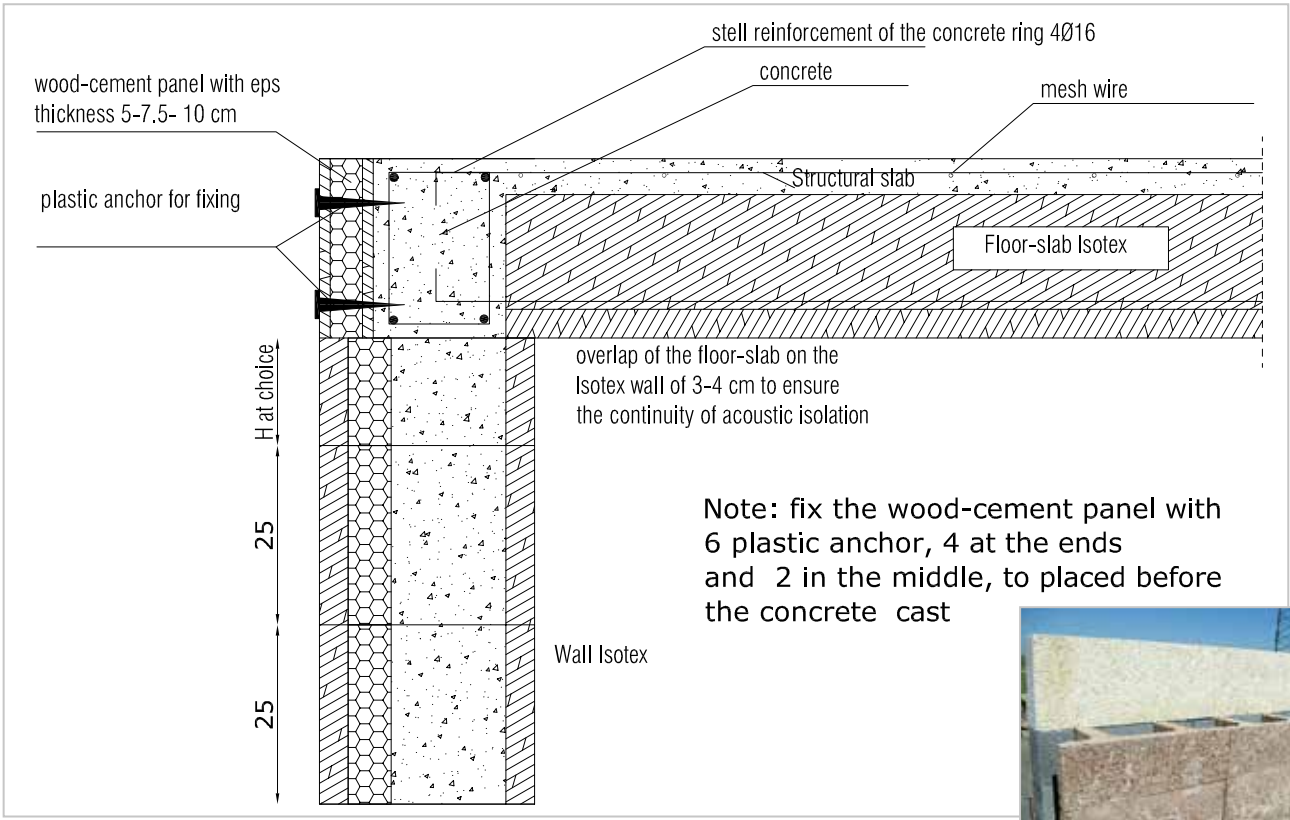
At the first pouring of the 6 courses, it is very important to keep the concrete level at mid-level of the sixth course. Subsequently, insert the vertical reinforcement to a height of 2 m, inserting it at the centre of the pillar at the same time as the pour (see the photograph on page 11), and vibrate this last with a small bodkin to ensure filling the walls.



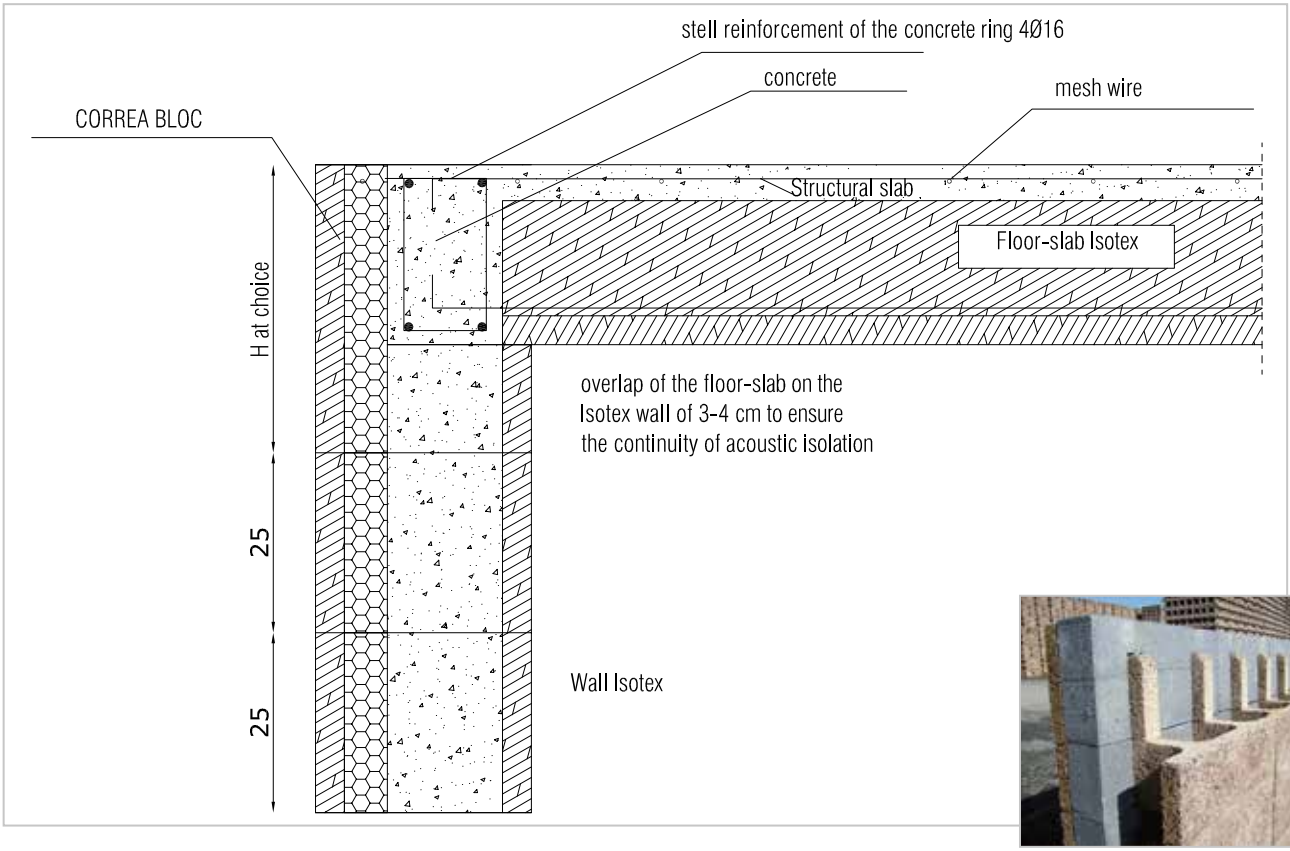
Distribution of the concrete within the blocks.

ELIMINATION OF THERMAL BRIDGES

Floor panel beam detail

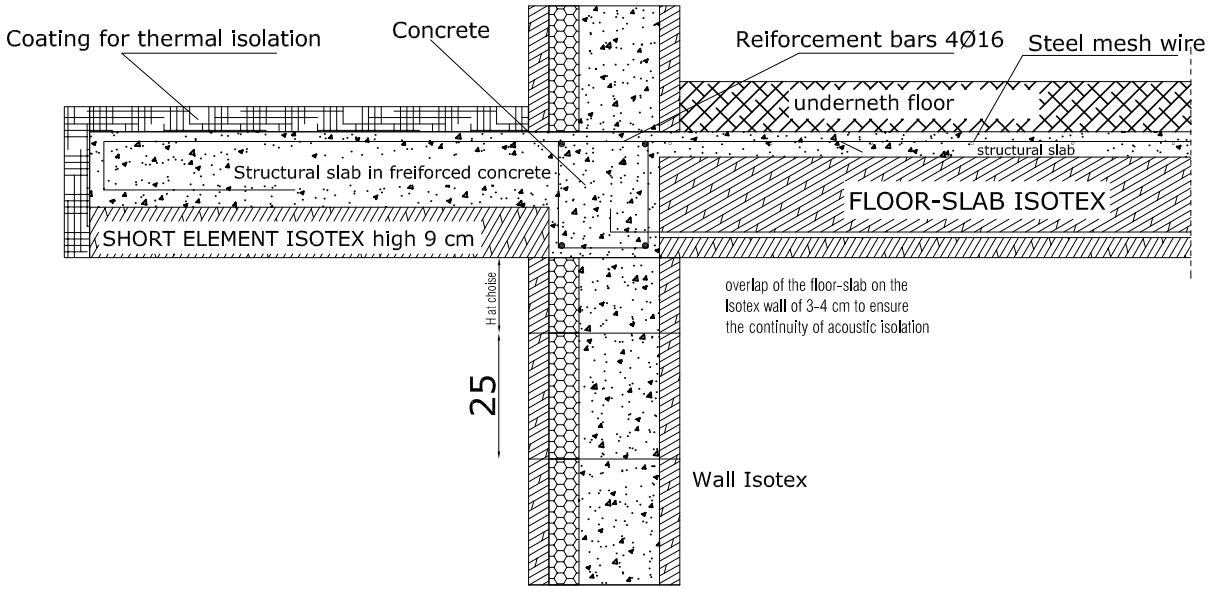


Note: fix the wood-cement panel with 6 plastic anchor, 4 at the ends and 2 in the middle, to placed before the concrete cast

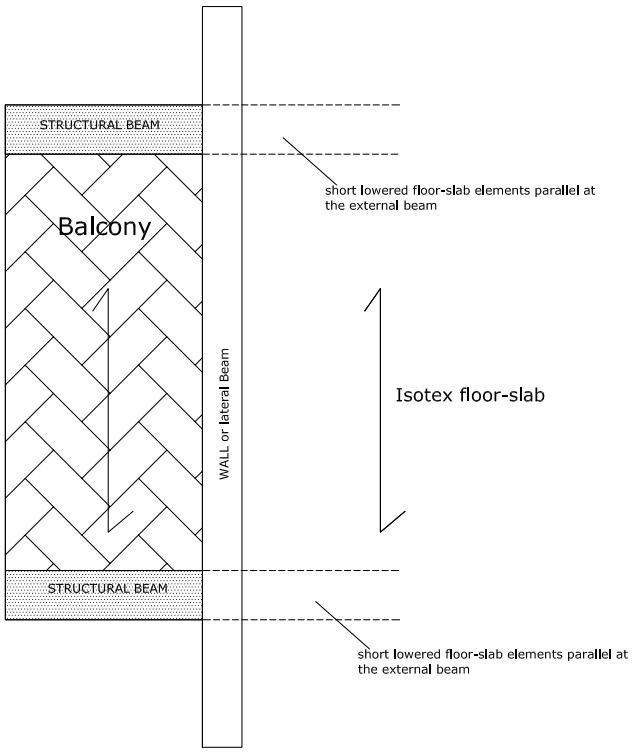


Balcony detail

1) shelft Balcony with short elements Isotex



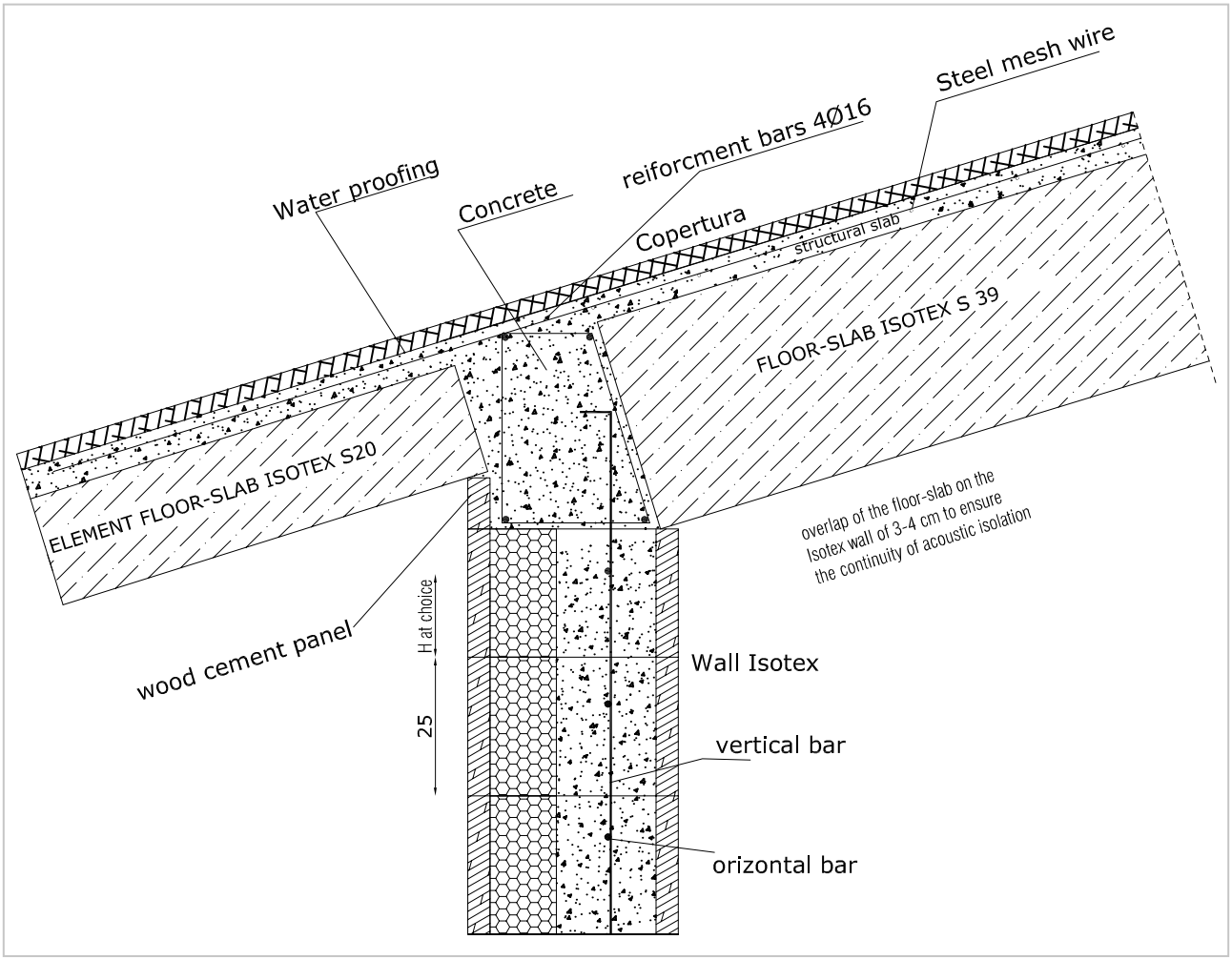
2) Balcony on structural beam, not shelft



ELIMINATION OF THERMAL BRIDGES

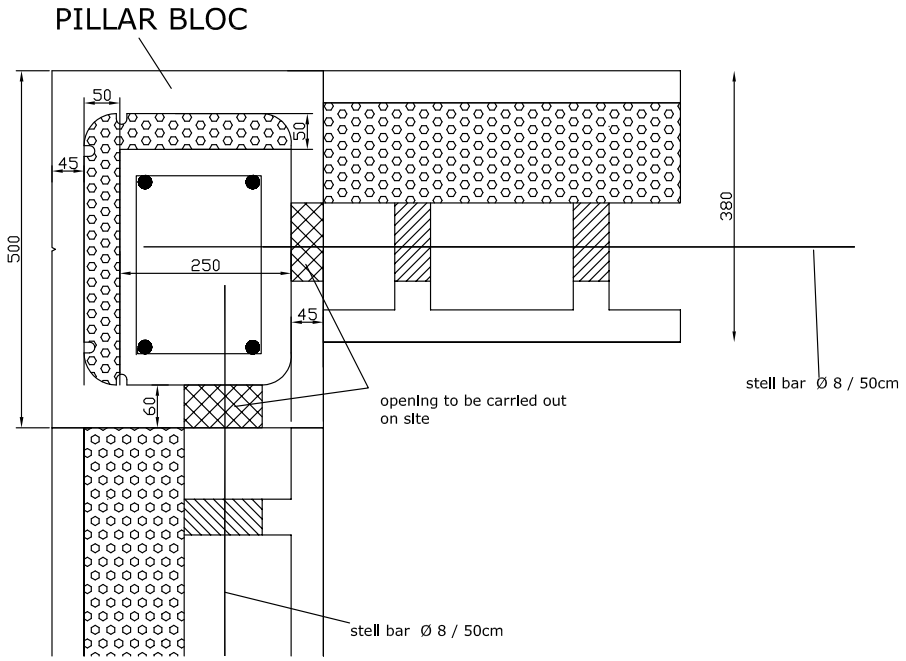
Proposals for eaves

ISOTEX makes available detailed documentation for the solution to these and other thermal bridges present in the structure of the building.

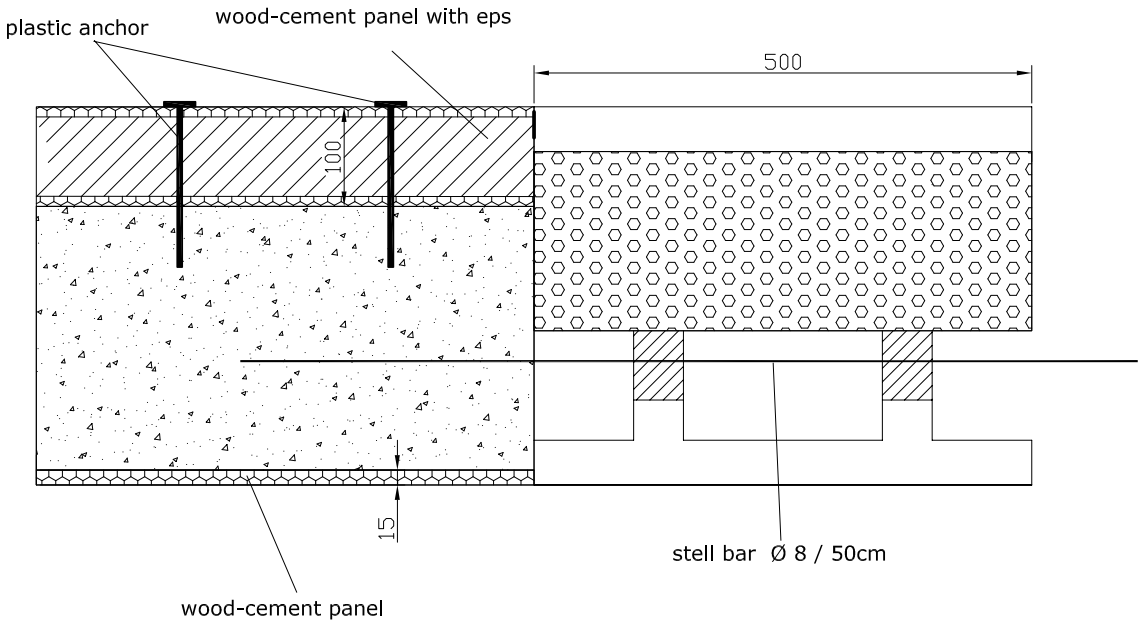


ELIMINATION OF THERMAL BRIDGES

Attachment to pillar blocks



Attachment to traditional pillars

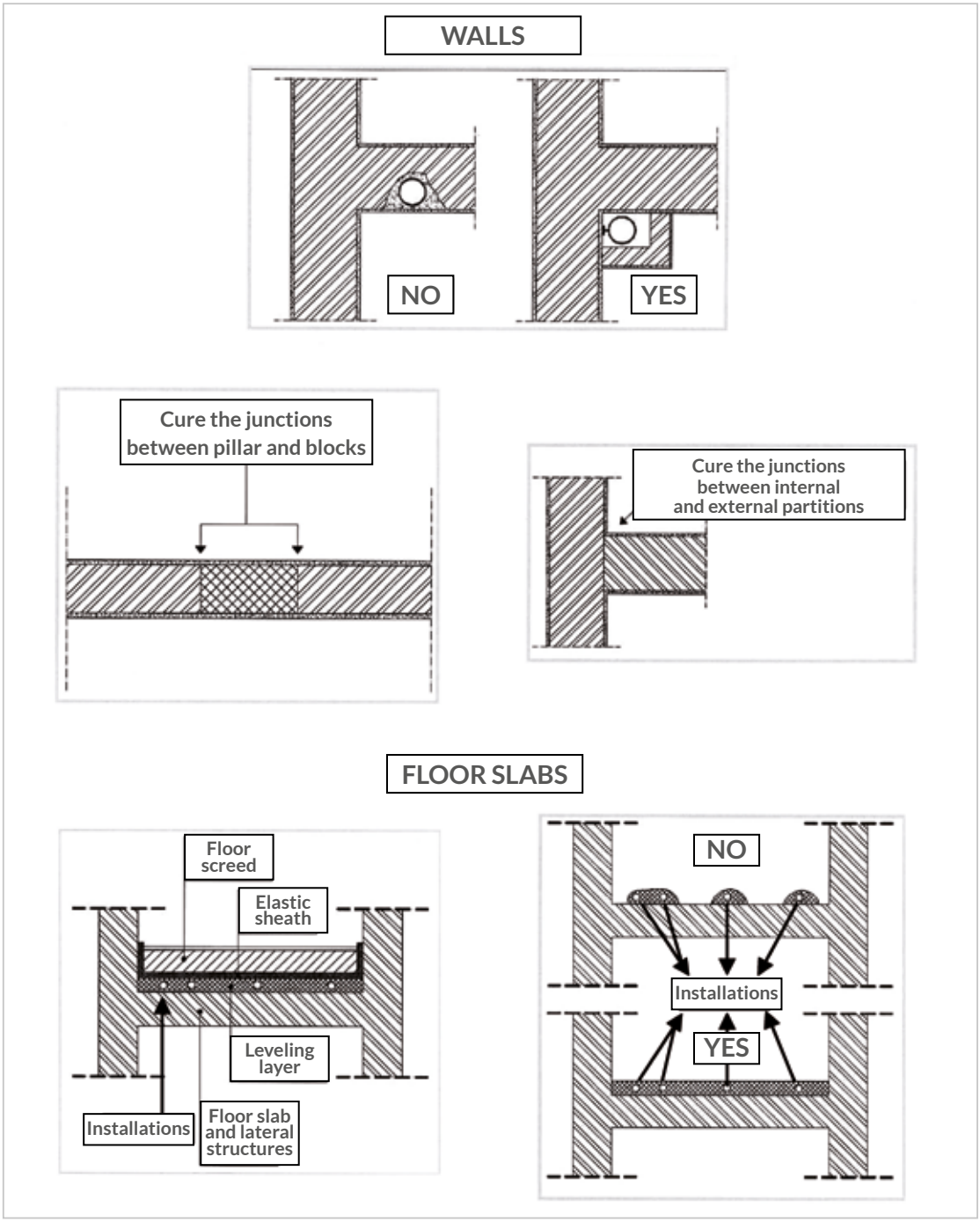


OPTIMIZATION OF ACOUSTIC PERFORMANCE

Construction details to be complied with

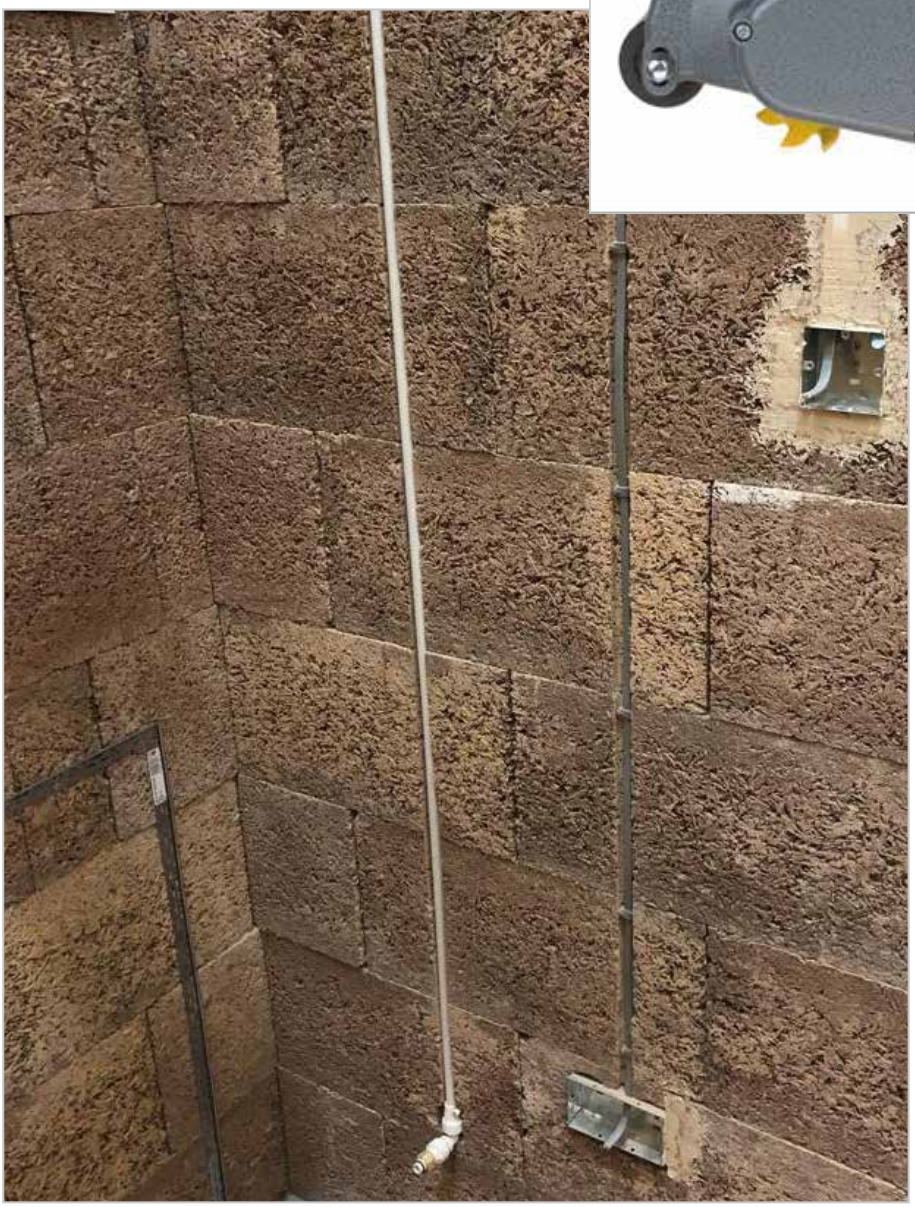
It is important to use construction materials whose certification comes within the values of regulations and correct building procedures.

To avoid incurring problems with the purchaser (there are thousands of them), it is important to use construction materials whose certification fall within the values of regulations and correct building procedures.

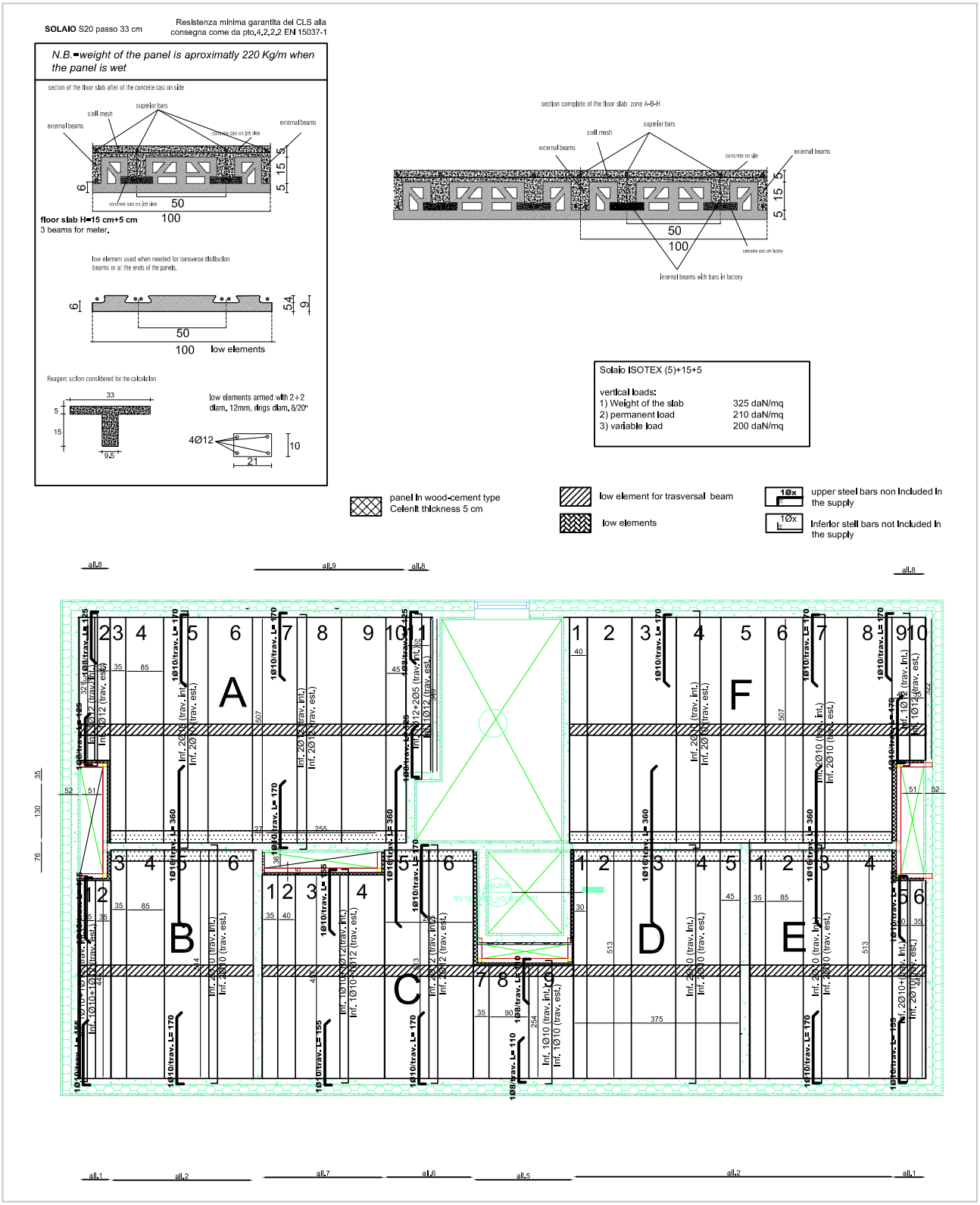


HOW TO MAKE CHANNELS IN ISOTEX WALLS

In order to make channels for plant, it is advised that, over the 4-5 cm of wood chip cement, a wall chaser is used which allows for adjusting the width and depth in order to obtain the required dimensions rapidly and precisely.



EXAMPLE OF ASSEMBLY SCHEME FOR ISOTEX FLOOR



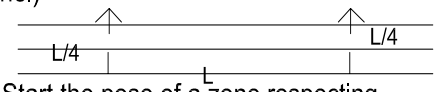
NB = the floor panels superimpose the vertical walls by 3 cm

EXAMPLE OF ASSEMBLY SCHEME FOR ISOTEX FLOOR

Example of assembly scheme

Laying Method for floor-planks

1) Positions where to lift the panels as in the picture (are marked red on the panel)



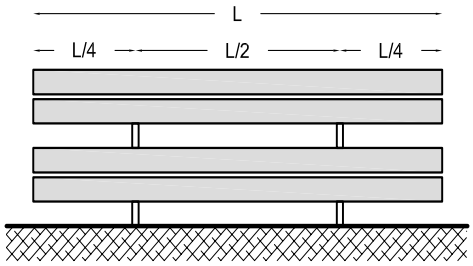
2) Start the pose of a zone respecting the numbers and starting from number 1,2 3,... (Dont reverse the panel according the position of the numbers on the drawing)

Prescriptions in charge of the Executing Company on job site

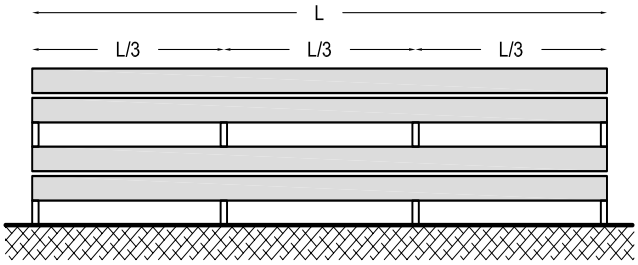
1) Beton- Concrete C25/30
2) Steel B500B .
3) Collaborating compression slab h=5 cm
4) Integration steel bars at upper for each beam (3 beams per meter) to pose 2 cm under the top of the finished slab over the wire mesh.
5) In the collaborating compression slab collocate wire mesh diam. 8mm/20x20, to overlap only in the middle of the lenght of the panel and never at the ends of the panel .
6) Elements for the support of the panels every 1,5 m maximum.
7) precamber of 1 cm for panels lenght of 4-5 m, of 2 cm for panels lenght of 6 m
8) Not included in the supply:
   - Steel bars for upper positionig;
   - Wire steel mesh according to law codes;
   - Steel bars for transverse ripartition beams.
9) Isotex reccomende, to improve the thermal-acoustic isolationton to overlap the panels of 3-4 cm on the Isotex walls.

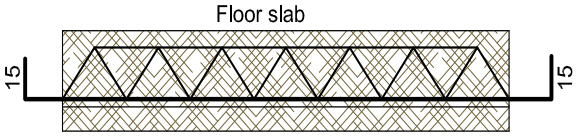
storage methods on work site

Per L < 5m



Per L > 5m





Note= the carryng out of the works is subject at the approval of this drawing for the Structural Engineer of the building and of the Executing Company .
It is in charge at the Structural Engineer of the building to indicate the reinforcement steel bars of balcony and cantilever slabs.

ISOTEX S.R.L.

42028 POVIGLIO (RE) - VIA D'ESTE N.5/7
TEL. 0522/965555 Fax 0522/965500
e-mail: info@blocchiisotex.it

ISOTEX FLOOR SLABS RANGE

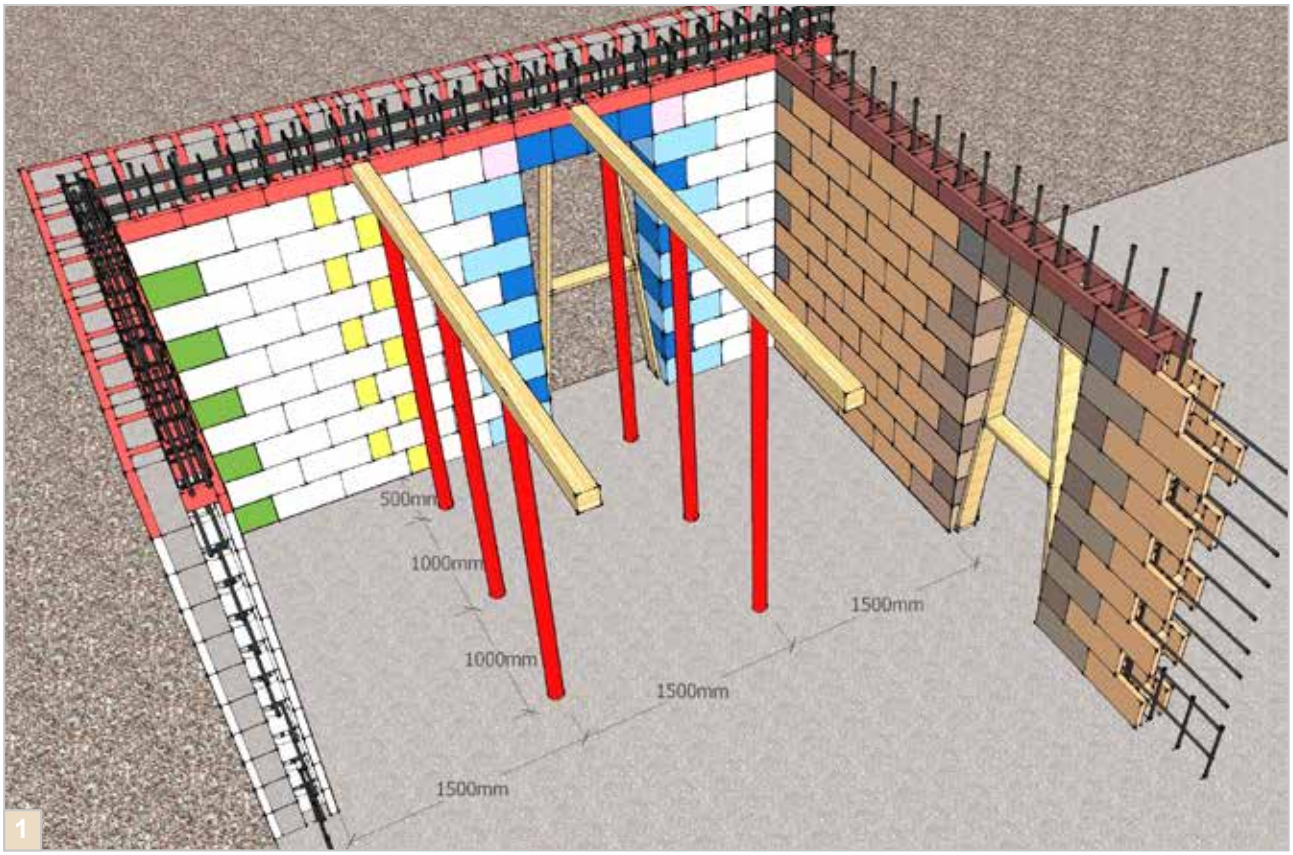
Floor slab S20

Floor slab S25

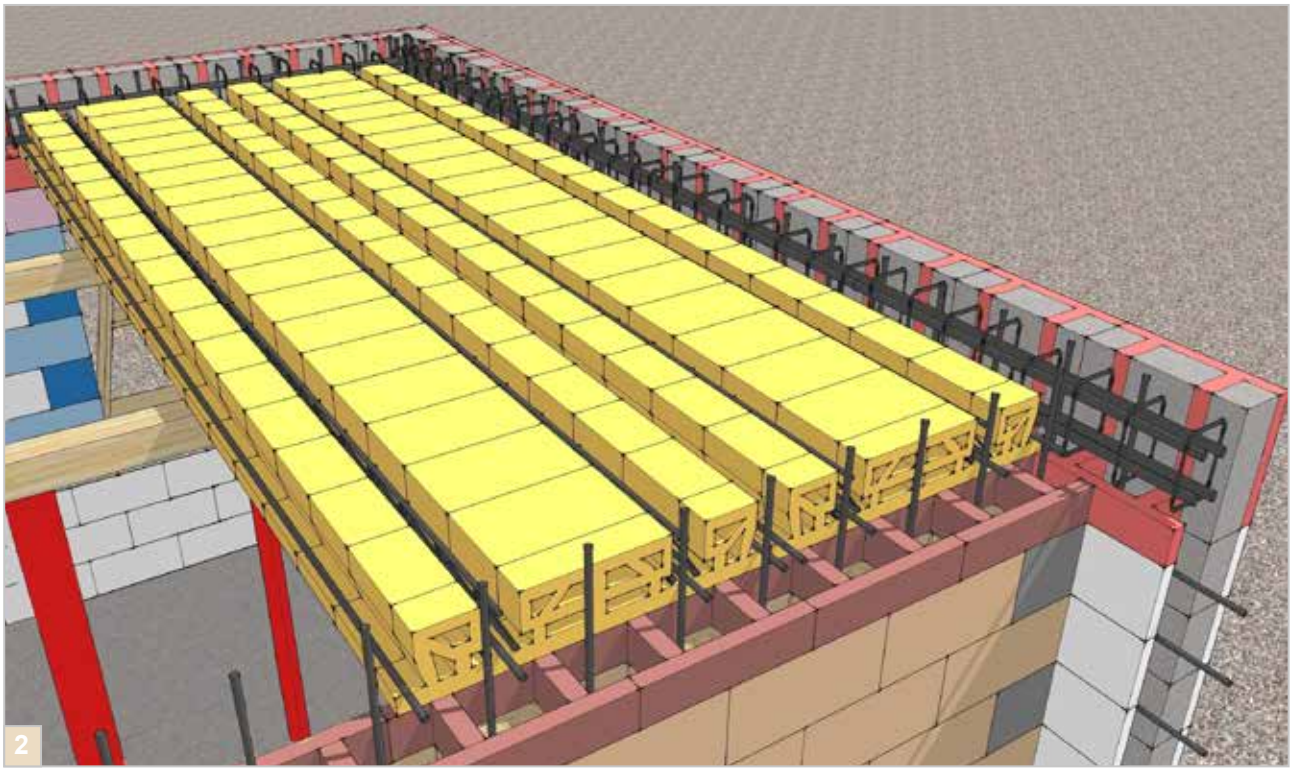
Floor slab S30

Floor slab S39

CORRECT LAYING OF ISOTEX FLOOR SLABS



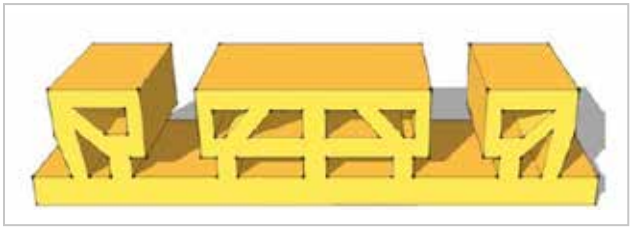
1



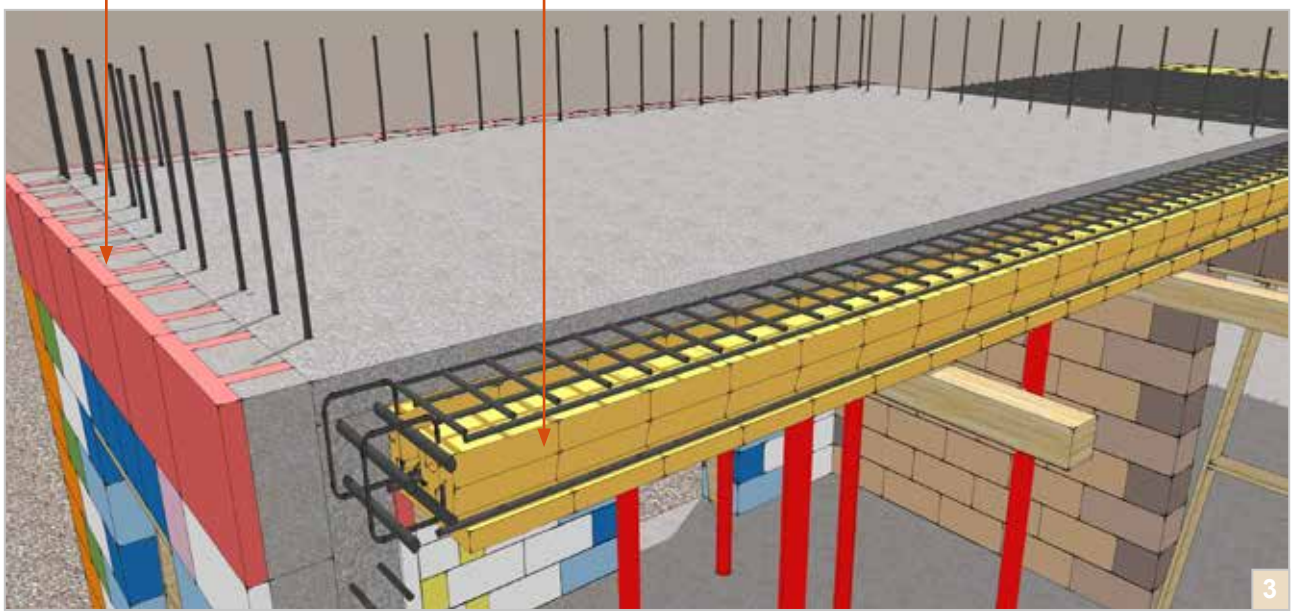
2

CORRECT LAYING OF ISOTEX FLOOR SLABS

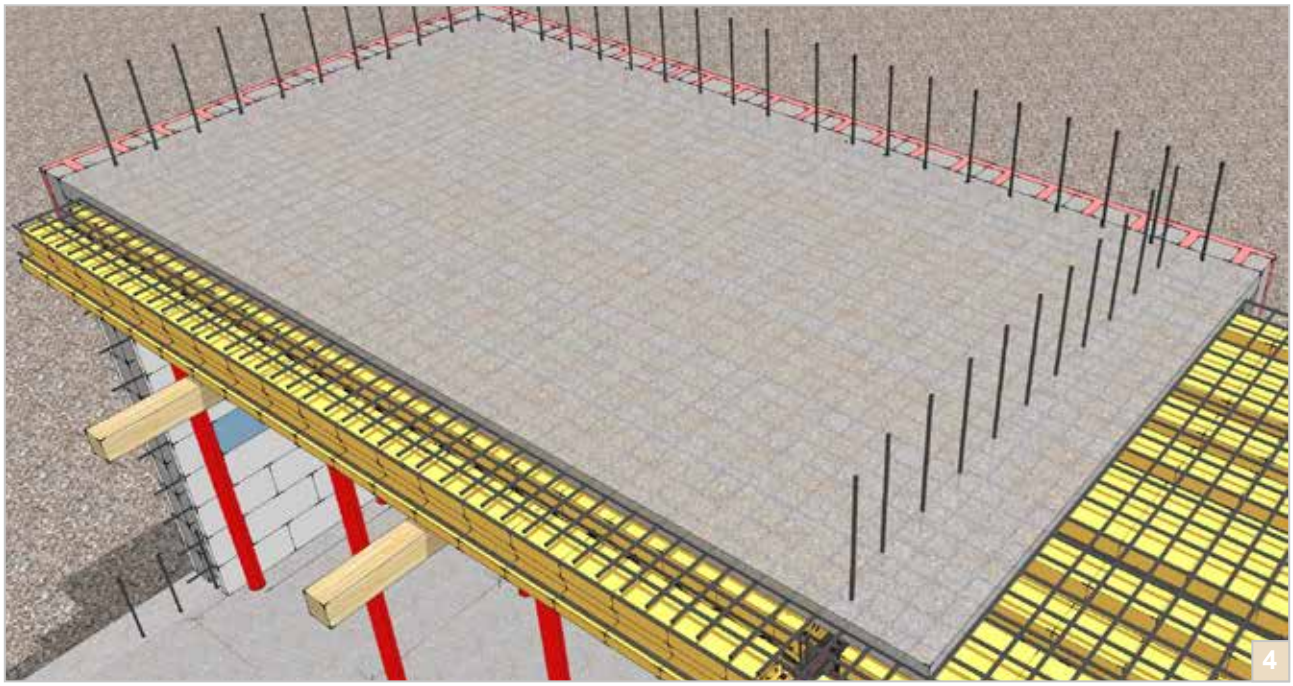
Correa block



Floor slab S25



3



4

RECOMMENDATION FOR CORRECT APPLICATION OF PLASTERS AND COLOURED FINISHES

The application of the plaster must be performed only on dry surfaces. Avoid, therefore, application on walling wet from rain, frozen or with unset concrete. Do not apply the plaster with temperatures less than 4°C as this can delay significantly the hardening of the plaster and, consequently, the application of finishings.

The week before applying plaster, close any gaps caused by incorrect laying with mortar in order to avoid notable thicknesses of plaster which might result in areas of crazing. The walls should be adequately levelled and squared during installation as the application of thicknesses of plaster to straighten and square off walling is inconceivable and ineffective.

A thicknesses of plaster greater of 2 cm may lead to the formation of cracks and crazing. Where it is necessary to apply plaster thicker than 2 cm, it is essential that it is applied in two coats separated by at least 28 days.

With these important premises, the plaster can be applied, pre-mixed or traditionally prepared, considering the fact that it must protect the walling from weather and wear and that its thickness must be as uniform as possible at 15 mm, bearing in mind that a greater or lesser thickness can facilitate the formation of cracks. Over the last few years, insulation is becoming ever more efficient which makes it all the more important to consider inserting a suitable netting, in alkali-resistant fibre glass with CE marking, positioned half way through the plaster; that being 7-8 mm from the support. Finishings (e.g. fine mortar or other) should always be applied after a coat of adhesive of hardened plaster, generally at least 3-4 weeks beforehand, depending on climatic conditions.

Isotex Srl does not recommend the use of this type of finish (for exteriors), which in order to work well must have a fully hardened base coat of about 15 mm so as avoid the formation of shrinkage cracks, given the enormous difficulties in verifying that application and timing conditions are met. From the experience gained since 1995 on various construction sites and considering that in recent years structural blocks have improved heat performance thus subjecting the plaster to greater stress, the solution we suggest consists in applying directly on the plaster base coat (15mm), levelled during application, a thick coloured finish after 4-6 weeks, thus obviating the need for fine mortar or other.

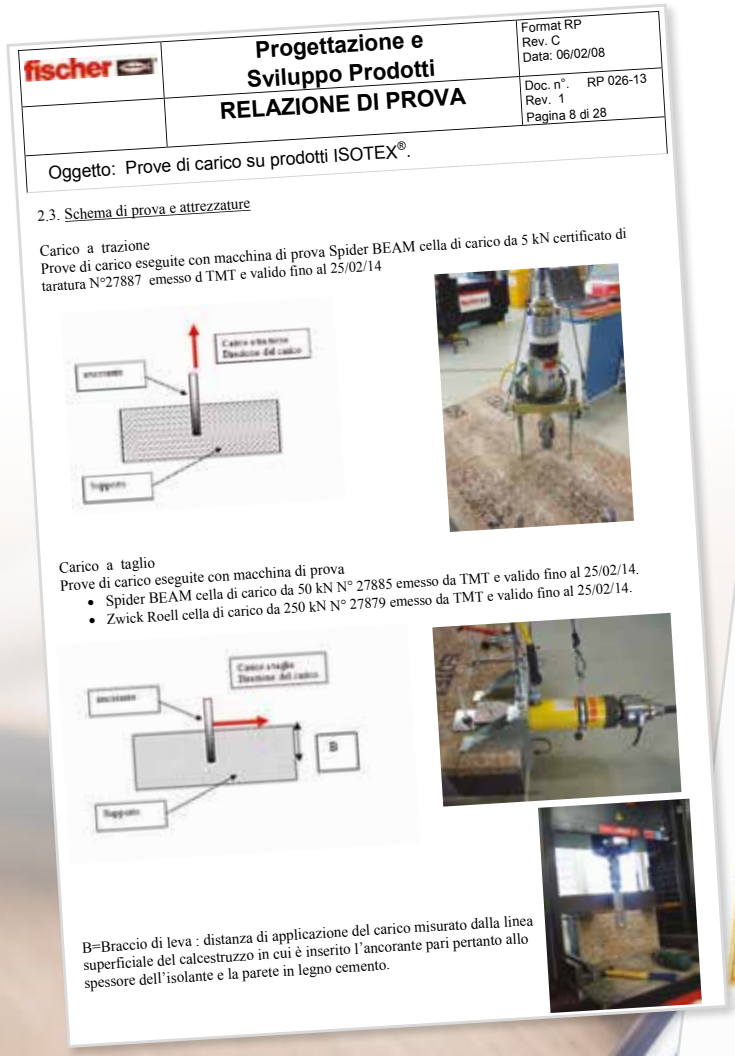
When applying the base coat and leveling with a straight edge it is important to maintain a uniform and consistent covering to avoid chalking the surface. Isotex Srl can provide information on the characteristics of these products for external finishes and methods of application to ensure waterproofing yet breathability. For interiors, we recommend an interval of 4-5 days between plaster foundation and fine mortar (or other finish) to ensure a good and thorough maturation of the plaster before applying the mortar.

Consider the particularities of the S39 panelling, which for thermal reasons has joints but not concrete between the panels. In correspondence with these junctions micro-cracks may form and therefore, to avoid this, it is recommended to use a plasterboard finish. For intermediate floors (S20-S25-S30), if a plaster finish with a thickness of 15 mm (no less) is chosen, the recommendation is to "embed" half way through the thickness, a reinforcing net in alkali-resistant fibre with CE marking. Then wait 4/5 days, depending on the season, before applying the finish and 4/6 weeks before painting.

Please note that, Isotex Srl, due to the fact that it is unable to physically monitor on a day to day basis compliance with these recommendations, the quality of materials used (plaster and coloured finishes) and timings between applications, disclaims any responsibility for issues that may occur in the future.

TESTING OF ANCHORS SEAL AND TEAR STRENGTH ON ISOTEX WALL

On website www.blocchiisotex.com you can find and download the reports of the complete tests and the technical data sheets of the different types of fixing.



fischer

	Progettazione e Sviluppo Prodotti	Format RP Rev. C Data: 06/02/08
	RELAZIONE DI PROVA	Doc. n°. RP 026-13 Rev. 1 Pagina 8 di 28

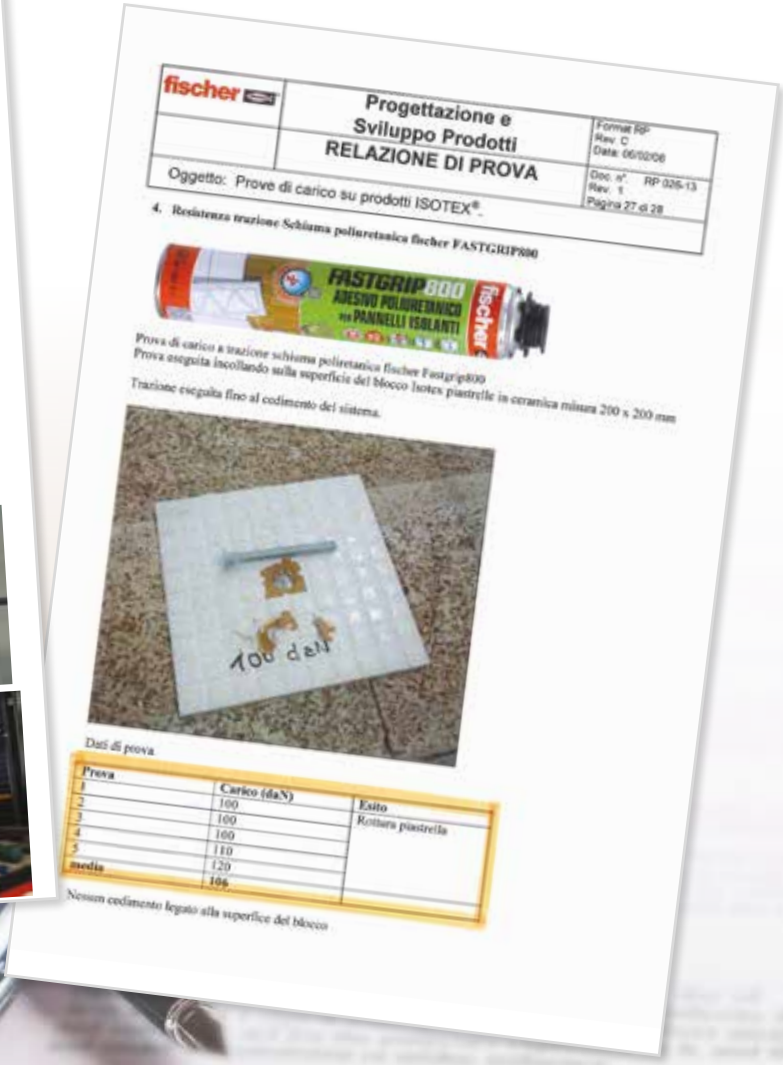
Oggetto: Prove di carico su prodotti ISOTEX®.

2.3. Schema di prova e attrezzature

Carico a trazione
Prove di carico eseguite con macchina di prova Spider BEAM cella di carico da 5 kN certificato di taratura N°27887 emesso d TMT e valido fino al 25/02/14

Carico a taglio
Prove di carico eseguite con macchina di prova
- Spider BEAM cella di carico da 50 kN N° 27885 emesso da TMT e valido fino al 25/02/14.
- Zwick Roell cella di carico da 250 kN N° 27879 emesso da TMT e valido fino al 25/02/14.

B=Braccio di leva : distanza di applicazione del carico misurato dalla linea superficiale del calcestruzzo in cui è inserito l'ancorante pari pertanto allo spessore dell'isolante e la parete in legno cemento.



fischer

	Progettazione e Sviluppo Prodotti	Format RP Rev. C Data: 06/02/08
	RELAZIONE DI PROVA	Doc. n°. RP 026-13 Rev. 1 Pagina 27 di 28

Oggetto: Prove di carico su prodotti ISOTEX®.

4. Resistenza trazione Schiuma poliuretanica fischer FASTGRIP800

Prova di carico a trazione schiuma poliretanica fischer Fastgrip800
Prova eseguita incollando sulla superficie del blocco Isotex piastrelle in ceramica misura 200 x 200 mm
Trazione eseguita fino al cedimento del sistema.

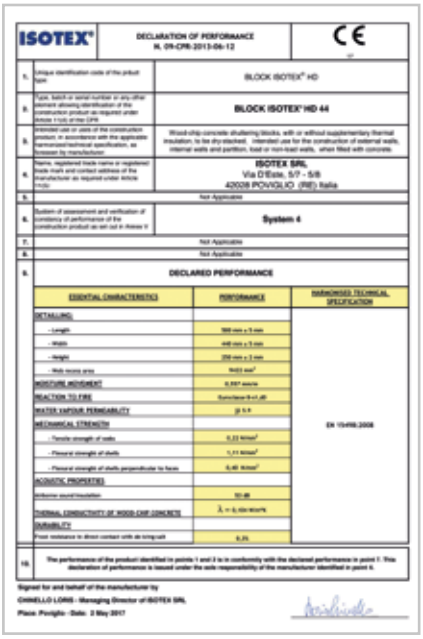
Dati di prova

Prova	Carico (daN)	Esito
1	100	Rottura piastrella
2	100	
3	100	
4	100	
5	110	
media	120	
	106	

Nessun cedimento legato alla superfice del blocco

CERTIFICATES

Partial extract of certification in the verbatim version on the site www.blocchiisotex.com



ISOTEX® — DECLARATION OF PERFORMANCE N. 09-CPR-2013-06-12 — CE

1. Unique identification code of the product type: BLOCK ISOTEX® HD
2. Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11(4) of the CPR: BLOCK ISOTEX® HD 44
3. Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by manufacturer: Wood-chip concrete shuttering blocks, with or without supplementary thermal insulation, to be dry-stacked; intended use for the construction of external walls, internal walls and partition, load or non-load walls, when filled with concrete.
4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5): ISOTEX SRL, Via D'Este, 5/7 - 5/8, 42028 POVIGLIO (RE) Italia
5. Not Applicable
6. System of assessment and verification of constancy of performance of the construction product as set out in Annex V: System 4
7. Not Applicable
8. Not Applicable
9. DECLARED PERFORMANCE

ESSENTIAL CHARACTERISTICS	PERFORMANCE	HARMONISED TECHNICAL SPECIFICATION
DETAILING:		EN 15498:2008
- Length	500 mm ± 5 mm	
- Width	440 mm ± 5 mm	
- Height	250 mm ± 2 mm	
- Web voids area	9422 mm²	
MOISTURE MOVEMENT	0,027 mm/m	
REACTION TO FIRE	Euroclass B-s1,d0	
WATER VAPOUR PERMEABILITY	μ ≤ 5	
MECHANICAL STRENGTH		
- Tensile strength of walls	0,22 N/mm²	
- Flexural strength of shells	1,11 N/mm²	
- Flexural strength of shells perpendicular to faces	0,40 N/mm²	
ACOUSTIC PROPERTIES		
Airborne sound insulation	50 dB	
THERMAL CONDUCTIVITY OF WOOD-CHIP CONCRETE	λ = 0,16 W/mK	
DURABILITY		
Frost resistance in direct contact with de-icing salt	0,25	

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 7. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and behalf of the manufacturer by
CARNELLO LORIS - Managing Director of ISOTEX SRL
Place: Poviglio - Date: 2 May 2017

Example of DOP (Protected Designation of Origin)

AENOR

Certificato di conformità
del controllo della produzione in fabbrica

CE
0099

0099/CPR/A87/0390

In conformità al Regolamento sui Prodotti da Costruzione (UE) N. 305/2011 del Parlamento europeo e del Consiglio, del 9 marzo 2011, l'organismo notificato AENOR (n. 0099) ha rilasciato questo certificato per

ISOTEX S.R.L.

con Sede Legale presso: Via D'Este, 5/7-5/8, 42028 - POVIGLIO, (RE) - Italia)
Prodotto da costruzione: Travetti per solai a travetti e blocchi
Norma armonizzata: EN 15037-1:2008
Riferimenti: In Allegato al Certificato
Stabilimento di produzione: Via D'Este, 5/7-5/8. 42028 - POVIGLIO (RE) - Italia)
Sistema di certificazione: Questo certificato attesta che sono state applicate tutte le disposizioni di cui al sistema 2+ relative alla valutazione e verifica della costanza della prestazione descritto nell'allegato ZA della norma armonizzata di cui sopra, e che il controllo di produzione in fabbrica soddisfa tutti i requisiti prescritti nella norma armonizzata.

Questo certificato rimane valido fino alla sua data di scadenza, a condizione che non siano cambiati i metodi di prova e requisiti per il controllo della produzione in fabbrica inclusi nella norma armonizzata per valutare la prestazione delle caratteristiche dichiarate, e che le condizioni di produzione non siano cambiate in modo significativo.

Data prima emissione: 2010-12-14
Data ultima emissione: 2018-12-14
Data di scadenza: 2019-12-14

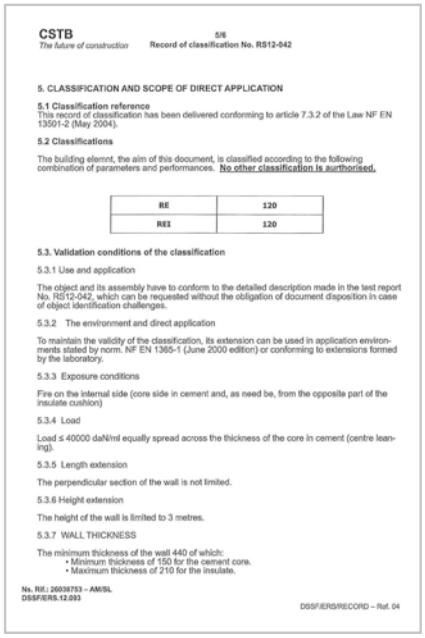
Rafael GARCÍA MEIRO
Direttore Generale

AENOR INTERNACIONAL S.A.U.
Génova 6. 28004 Madrid. España
Tel. 91 432 60 00.- www.aenor.com

Organismo Notificato accreditato da ENAC con Acreditamento 01/C-PR016

AENOR Italia Corso Trapani, 16. 10139 Torino - www.aenoritalia.com

Obligatory flooring EC marque dated 01.01.2011



CSTB
The future of construction

5/6
Record of classification No. RS12-042

5. CLASSIFICATION AND SCOPE OF DIRECT APPLICATION

5.1 Classification reference
This record of classification has been delivered conforming to article 7.3.2 of the Law NF EN 13501-2 (May 2004).

5.2 Classifications

The building elemnt, the aim of this document, is classified according to the following combination of parameters and performances. No other classification is authorised.

RE	120
REI	120

5.3. Validation conditions of the classification

5.3.1 Use and application

The object and its assembly have to conform to the detailed description made in the test report No. RS12-042, which can be requested without the obligation of document disposition in case of object identification challenges.

5.3.2 The environment and direct application

To maintain the validity of the classification, its extension can be used in application environments stated by norm. NF EN 1365-1 (June 2000 edition) or conforming to extensions formed by the laboratory.

5.3.3 Exposure conditions

Fire on the internal side (core side in cement and, as need be, from the opposite part of the insulate cushion)

5.3.4 Load

Load ≤ 40000 daN/ml equally spread across the thickness of the core in cement (centre leaning).

5.3.5 Length extension

The perpendicular section of the wall is not limited.

5.3.6 Height extension

The height of the wall is limited to 3 metres.

5.3.7 WALL THICKNESS

The minimum thickness of the wall 440 of which:
- Minimum thickness of 150 for the cement core.
- Maximum thickness of 210 for the insulate.

No. RII.: 26036753 – AM/SL
DSSF/ERS.12.093

DSSF/ERS/RECORD – Ref. 04

REI120 - CSTB classification

DNV·GL

MANAGEMENT SYSTEM CERTIFICATE

Certificato no./Certificate No.: CERT-04707-99-AQ-BOL-SINCERT
Data prima emissione/Initial date: 29 luglio 1999
Validità/Valid: 13 luglio 2017 - 13 luglio 2020

Si certifica che il sistema di gestione di/This is to certify that the management system of

ISOTEX S.r.l. - Sede Lega e Operativa
Via D'Este 5/7 - 5/8 - 42028 Poviglio (RE) - Italy

È conforme ai requisiti della norma per il Sistema di Gestione Qualità/ has been found to conform to the Quality Management System standard:
ISO 9001:2015

Questa certificazione è valida per il seguente campo applicativo:
Produzione e commercializzazione di: blocchi cassero, solai, elementi da costruzione e manufatti in genere in legno-cemento (EA: 16, 29)

This certificate is valid for the following scope:
Manufacture and trade of wood-chip concrete shuttering blocks, floor slabs, construction elements and artifacts in general (EA: 16, 29)

Luogo e Data/Place and date:
Vimercate (MB), 31 luglio 2018

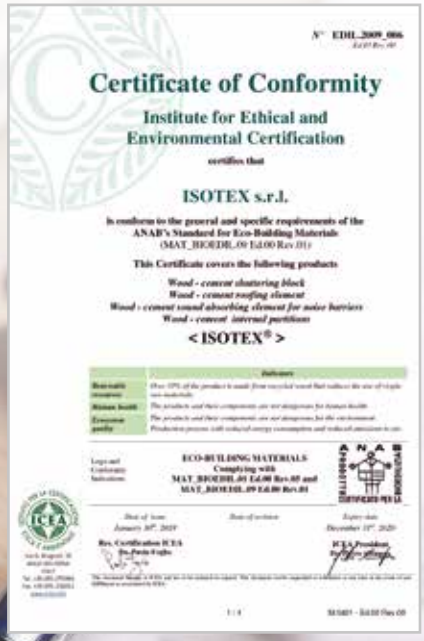
ACCREDIA

Per l'Organismo di Certificazione/ For the Certification Body
DNV GL – Business Assurance
Via Energy Park, 14 - 20871 Vimercate (MB) - Italy

Zeno Beltrami
Management Representative

La validità del presente Certificato è subordinata al rispetto delle condizioni contenute nel Contratto di Certificazione/ Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
DNV GL Business Assurance Italia S.r.l., Via Energy Park, 14 - 20871 Vimercate (MB) - Italy. TEL:039 68 99 905. www.dnvgl.it

Certification of quality ISO 9001:2008



N° EDIL_2009_006

Certificate of Conformity

Institute for Ethical and Environmental Certification

certifies that

ISOTEX s.r.l.

In conform to the general and specific requirements of the ANAB's Standard for Eco-Building Materials (MAT_BIOEDIL_09 Ed.00 Rev.01)

This Certificate covers the following products

Wood - cement shuttering block
Wood - cement roofing element
Wood - cement sound absorbing element for noise barriers
Wood - cement internal partitions

<ISOTEX® >

ECO-BUILDING MATERIALS
Complying with
MAT_BIOEDIL_01 Ed.00 Rev.05 and
MAT_BIOEDIL_09 Ed.00 Rev.01

Sustainable housing certification

EPD

EPD

ENVIRONMENTAL PRODUCT DECLARATION (EPD) FOR WOOD CEMENT BLOCKS

ISOTEX®

Company: ISOTEX Srl
Via D'Este, 5/7-5/842028 Poviglio (RE)
www.blocchiisotex.com
Programme operator: The International EPD ® System –
c/o EPD International AB
Valhallavägen 81 SE-114 27 Stockholm Sweden
www.environdec.com
PCR: 2012:01 Construction products and construction services version 2.3
Geographical scope: Europe
EPD registration number: S-P-01472
ECO EPD reference number: 00000795
Date of publication: 2018-12-18
Date of validity: 2023-12-18

EPD - Environmental Product Declaration

This Document named “Operational Assembly Manual” is the exclusive property of ISOTEX Srl.

ISOTEX makes the operational assembly manual available to its clients as a useful and important compendium for the correct laying and use of Blocks and Flooring panels, made up of the ISOTEX® anti-seismic construction method.

The operational assembly manual contains and illustrates the particulars of applying ISOTEX® products with related recommendations. The document has been produced by ISOTEX Srl, and consequently must only and exclusively be used in relation to the ISOTEX® construction method.

The operational assembly manual may not be reproduced and used, as a whole or in part, without the express previous approval of ISOTEX Srl.

All abuses and/or misappropriation of the operational assembly manual (including attempts to associate it to a method and/or a product even if only similar to ISOTEX®) will be prosecuted to the full extent of the law, notwithstanding ISOTEX® declining all responsibilities regarding any damages or malfunctions deriving from the aforementioned abuses and/or misappropriation.

Maximum seismic safety & living comfort, always.

ISOTEX®
Wood-cement blocks and floor slabs

ISOTEX Srl - Via D'Este, 5/7-5/8 - 42028 Poviglio (RE) - Italy
Tel.: +39 0522 9632 - Fax: +39 0522 965500
info@blocchiisotex.it - www.blocchiisotex.com

UNI EN 15037-1
UNI EN 15498
ETA 08/0023

QUALITY SYSTEM CERTIFICATION DNV·GL ISO 9001

ACCREDIA

ANAB PRODOTTO BIOEDILIZIA CERTIFICATO PER LA ICEA

EPD®
THE INTERNATIONAL EPD® SYSTEM

06-2020