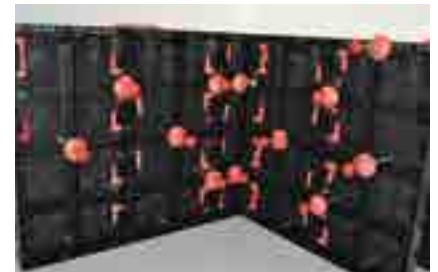


GEOPANEL TECHNICAL MANUAL

GEOPANEL MANUALE TECNICO



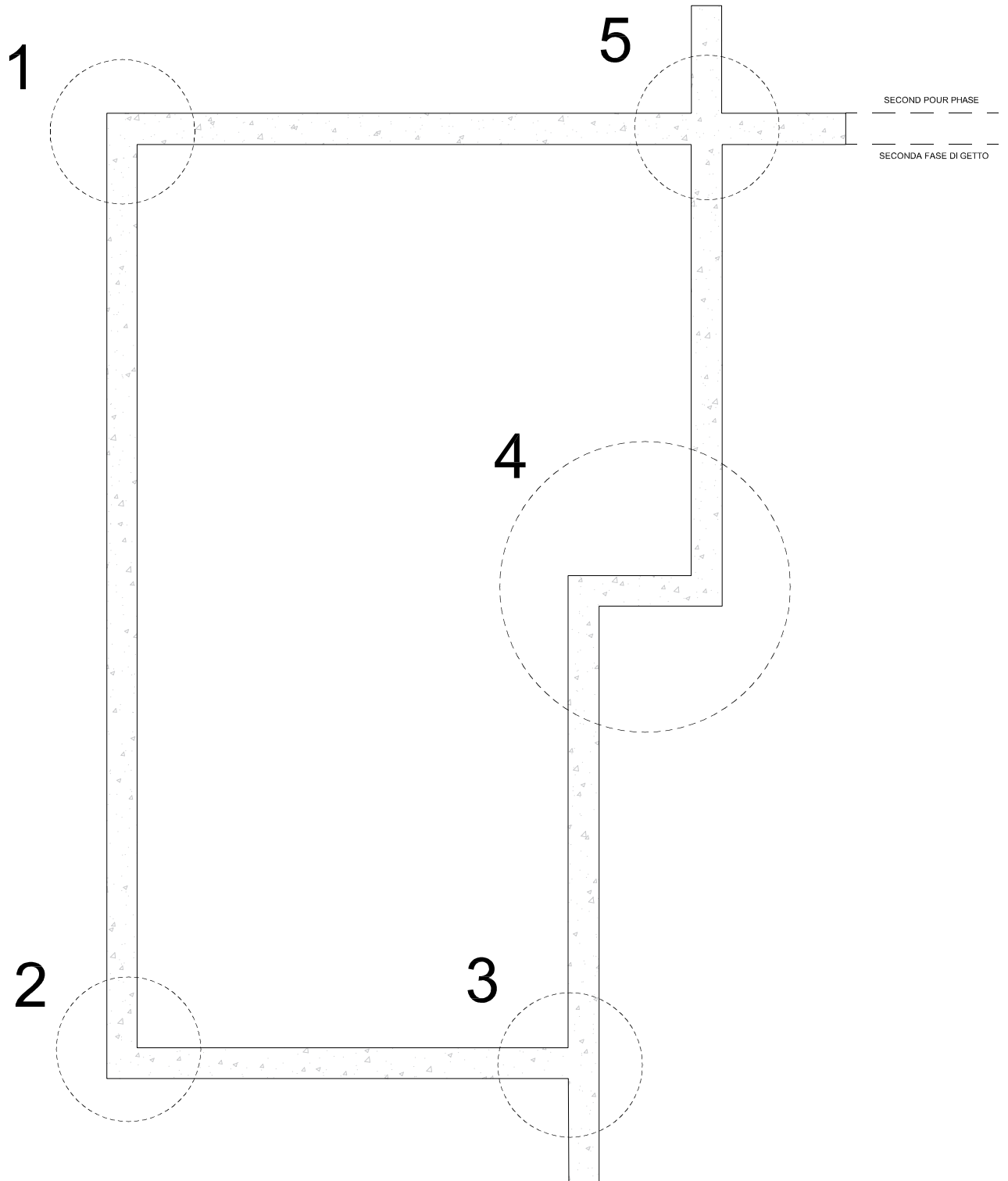
- ✓ **LIGHT**
- ✓ **PRACTICAL**
- ✓ **REUSABLE**

CONTENTS

PAG. 2	EXECUTION MODALITY - MODALITA' DI ESECUZIONE
PAG. 5	LIST OF COMPONENTS - LISTA COMPONENTI
PAG. 7	EXTERNAL CORNER ASSEMBLING - ASSEMBLAGGIO ANGOLO ESTERNO
PAG. 8	INTERNAL CORNER ASSEMBLING - ASSEMBLAGGIO ANGOLO INTERNO
PAG. 9	COMPLETE CORNER ASSEMBLING - ASSEMBLAGGIO ANGOLO COMPLETO
PAG. 11	CORNER CONFIGURATIONS - CONFIGURAZIONI D'ANGOLO
PAG. 12	WALL ASSEMBLING - ASSEMBLAGGIO MURO
PAG. 15	"T" INTERSECTION ASSEMBLING - ASSEMBLAGGIO INTERSEZIONE A "T"
PAG. 17	"T" INTERSECTION CONFIGURATIONS - CONFIGURAZIONI INTERSEZIONI A "T"
PAG. 18	CROSS INTERSECTION ASSEMBLING - ASSEMBLAGGIO INTERSEZIONI A CROCE
PAG. 20	"S" INTERSECTION ASSEMBLING - ASSEMBLAGGIO INTERSEZIONE A "S"
PAG. 22	COMPENSATIONS WITH GEOPANEL WP - COMPENSAZIONI CON GEOPANEL WP
PAG. 24	WOODEN COMPENSATIONS - COMPENSAZIONI IN LEGNO
PAG. 28	CLOSING PANEL ASSEMBLING - ASSEMBLAGGIO PANNELLO DI CHIUSURA
PAG. 30	CLOSING WOODEN COMPENSATION - COMPENSAZIONE DI CHIUSURA IN LEGNO

SPECIAL APPLICATIONS

PAG. 32	DOOR ASSEMBLING - ASSEMBLAGGIO PORTA
PAG. 33	WINDOW ASSEMBLING - ASSEMBLAGGIO FINESTRA
PAG. 35	GRADE SLAB ASSEMBLING - ASSEMBLAGGIO PLATEA
PAG. 36	PLINTH ASSEMBLING - ASSEMBLAGGIO PLINTO
PAG. 37	GRADE BEAM ASSEMBLING - ASSEMBLAGGIO TRAVI ROVESCE
PAG. 38	WALL AND COLUMNS INTEGRATION - INTEGRAZIONE MURO CON COLONNE
PAG. 39	WALL AND COLUMN INTEGRATION - INTEGRAZIONE MURO CON COLONNA
PAG. 40	HORIZONTAL MULTI-STAGE POUR - RIPRESA DI GETTO ORIZZONTALE
PAG. 41	VERTICAL MULTI-STAGE POUR - RIPRESA DI GETTO VERTICALE
PAG. 42	ALIGNMENT FORMWORK - ALLINEAMENTO CASSEFORMA
PAG. 43	WALL PROPPING WITH TIES - PUNTELLAZIONE MURI CON TIRANTI
PAG. 44	LIFTING AND MOVING - SOLLEVAMENTO E MOVIMENTAZIONE
PAG. 45	POUR MODALITY - MODALITA' DI GETTO
PAG. 46	POUR GUIDELINES - PRESCRIZIONI DI GETTO
PAG. 48	OPERATION AND MAINTENANCE REQUIREMENTS - PRESCRIZIONI DI USO E MANUTENZIONE
PAG. 48	SAFETY REQUIREMENTS - PRESCRIZIONI DI SICUREZZA



1. CORNERS 1 AND 2 ASSEMBLING
ASSEMBLAGGIO ANGOLI 1 E 2



2. WALL BUILDING FROM THE CORNERS
COSTRUZIONE MURO DAGLI ANGOLI



GEOPANEL WP COMPENSATION
COMPENSAZIONE CON GEOPANEL WP

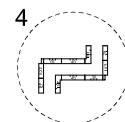
3. CORNER 3 ASSEMBLING
ASSEMBLAGGIO ANGOLO 3



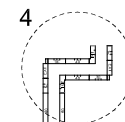
4. WALL BUILDING FROM THE CORNERS
COSTRUZIONE MURO DAGLI ANGOLI



5. "S" INTERSECTION ASSEMBLING
ASSEMBLAGGIO INTERSEZIONE A "S"

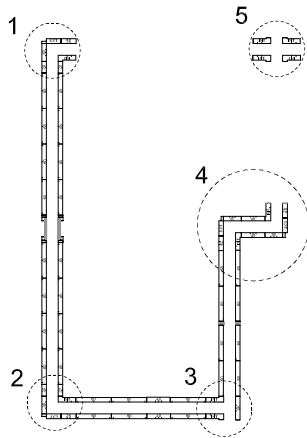


6. WALL BUILDING FROM THE CORNERS
COSTRUZIONE MURO DAGLI ANGOLI

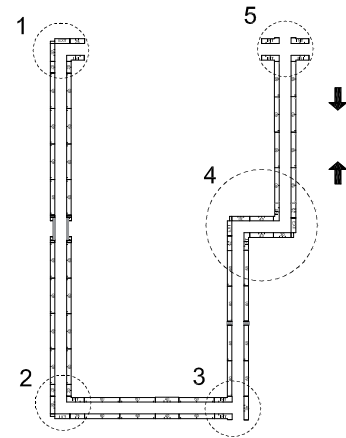


WOODEN COMPENSATION
COMPENSAZIONE IN LEGNO

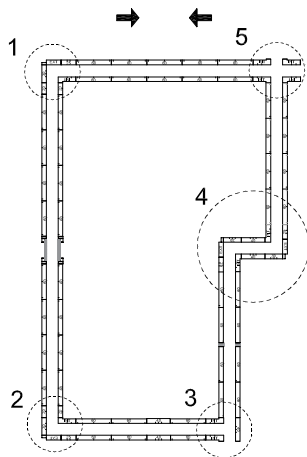
7. CORNER 5 ASSEMBLING
ASSEMBLAGGIO ANGOLO 5



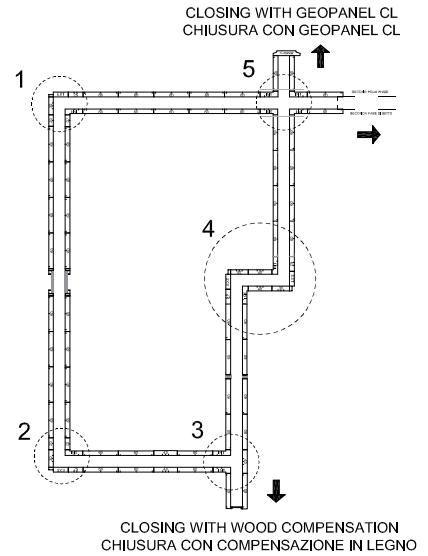
8. WALL BUILDING FROM THE CORNERS
COSTRUZIONE MURO DAGLI ANGOLI



9. WALL BUILDING FROM THE CORNERS
COSTRUZIONE MURO DAGLI ANGOLI



10. CLOSING ELEMENTS ASSEMBLING (NODE3 AND 5)
ASSEMBLAGGIO ELEMENTI DI CHIUSURA (NODI 3 E 5)



LIST OF COMPONENTS

LISTA COMPONENTI

HANDLE	MANIGLIA	CAP Ø 25mm	TAPPO Ø 25mm	CAP Ø 43mm	TAPPO Ø 43mm	ANCHOR NUT Ø 120mm	ROSETTA Ø 120mm	ANCHOR NUT Ø 65mm	ROSETTA Ø 65mm	TIE ROD	BARRA RULLATA
SPACER	DISTANZIATORE	BRACE CONNECTOR	NODO STABILIZZATORE	CONNECTOR PLATE	NODO STABILIZZATORE	PIN Ø 10 WITH R-CLIP	PERNO Ø 10 CON COPIGLIA	FIXING BRACKET	STAFFA D'ANCORAGGIO	CHAMFER EDGE PROFILE	SMUSSO PER ANGOLI
ALIGNMENT BAR FUN2000				BARRA ALLINEATRICE FUN2000				CORNER BAR STUD	TESTATA PER ANGOLO	BAR CONNECTOR	CONNETTORE MM120
ALIGNMENT BAR UN 500 - 750 - 1000 - 1500				BARRA ALLINEATRICE UN 500 - 750 - 1000 - 1500				LIFTING HOOK	GANCIO DI SOLLEVAMENTO	CHAIN	CATENA
PUSH \ PULL PROP				PUNTELLO TIRA \ SPINGI							

GEOPANEL 120X60

BACK VIEW / VISTA POSTERIORE		FRONT VIEW / VISTA ANTERIORE	
------------------------------	--	------------------------------	--

GEOPANEL 20X60		GEOPANEL 25X60		GEOPANEL 30X60	
BACK VIEW VISTA POSTERIORE	FRONT VIEW VISTA ANTERIORE	BACK VIEW VISTA POSTERIORE	FRONT VIEW VISTA ANTERIORE	BACK VIEW VISTA POSTERIORE	FRONT VIEW VISTA ANTERIORE

GEOPANEL 35X60		GEOPANEL 40X60		INNER CORNER	
BACK VIEW VISTA POSTERIORE	FRONT VIEW VISTA ANTERIORE	BACK VIEW VISTA POSTERIORE	FRONT VIEW VISTA ANTERIORE	BACK VIEW VISTA POSTERIORE	FRONT VIEW VISTA ANTERIORE

OUTER CORNER		GEOPANEL CL 20-25-30		GEOPANEL CL 35-40-45	
BACK VIEW VISTA POSTERIORE	FRONT VIEW VISTA ANTERIORE	BACK VIEW VISTA POSTERIORE	FRONT VIEW VISTA ANTERIORE	BACK VIEW VISTA POSTERIORE	FRONT VIEW VISTA ANTERIORE

GEOPANEL WP 18		GEOPANEL WP 21		GEOPANEL WP 27	
BACK VIEW VISTA POSTERIORE	FRONT VIEW VISTA ANTERIORE	BACK VIEW VISTA POSTERIORE	FRONT VIEW VISTA ANTERIORE	BACK VIEW VISTA POSTERIORE	FRONT VIEW VISTA ANTERIORE

EXTERNAL CORNER ASSEMBLING

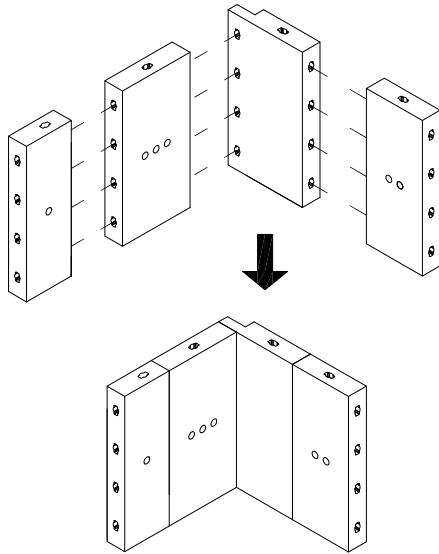
ASSEMBLAGGIO ANGOLO ESTERNO

1. EXTERNAL CORNER ASSEMBLING ASSEMBLAGGIO ANGOLO ESTERNO	2. PANELS FIXING WITH HANDLES FISSAGGIO PANNELLI CON MANIGLIE
3. GEOPANEL ELEMENTS INSTALLATION INSTALLAZIONE ELEMENTI GEOPANEL	4. PANELS FIXING WITH HANDLES FISSAGGIO PANNELLI CON MANIGLIE

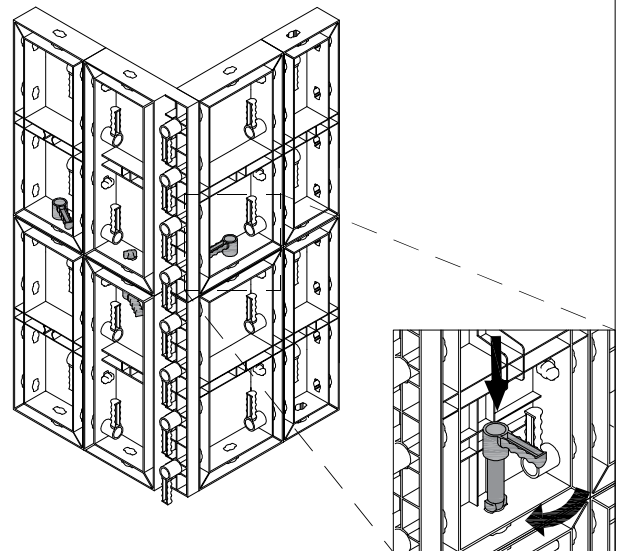
EXTERNAL CORNER ASSEMBLING

ASSEMBLAGGIO ANGOLO ESTERNO

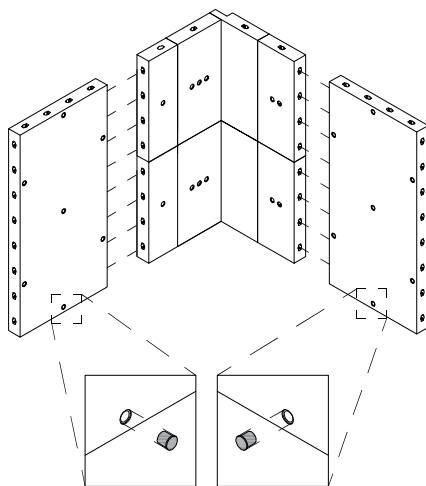
5. SECOND LEVEL PANELS INSTALLATION
INSTALLAZIONE DEL SECONDO LIVELLO DI PANNELLI



6. PANELS FIXING WITH HANDLES
FISSAGGIO PANNELLI CON MANIGLIE

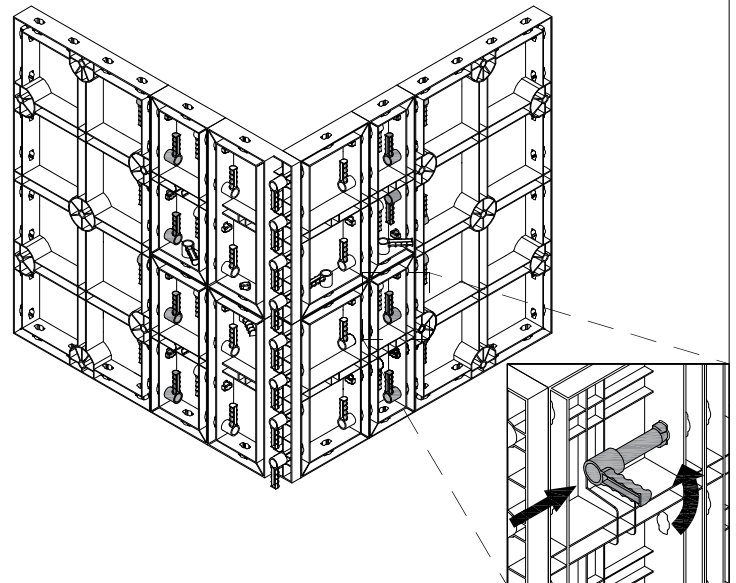


7. GEOPANEL 120X60 INSTALLATION
INSTALLAZIONE GEOPANEL 120X60



WARNING: CLOSE LOWER HOLES OF GEOPANEL 120X60 WITH CAPS Ø 25mm
ATTENZIONE: CHIUDERE I FORI INFERIORI DEI GEOPANEL 120X60 CON TAPPI Ø 25mm

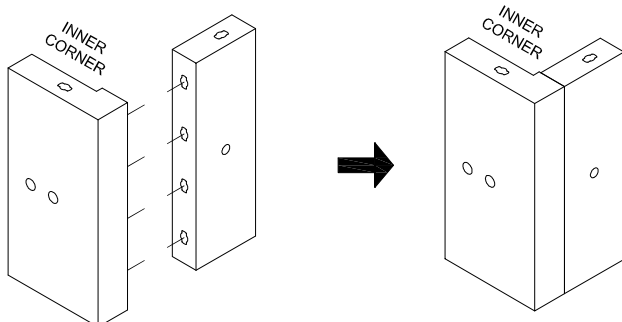
8. PANELS FIXING WITH HANDLES
FISSAGGIO PANNELLI CON MANIGLIE



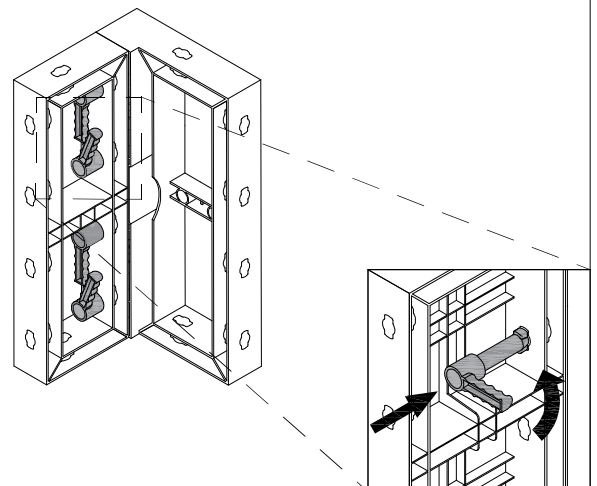
INTERNAL CORNER ASSEMBLING

ASSEMBLAGGIO ANGOLO INTERNO

1. INTERNAL CORNER ASSEMBLING
ASSEMBLAGGIO ANGOLO INTERNO



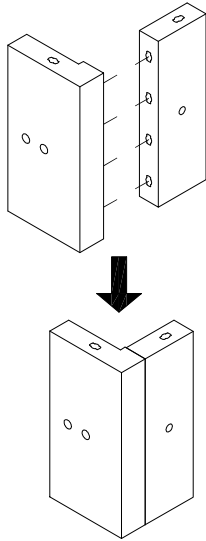
2. PANELS FIXING WITH HANDLES
FISSAGGIO PANNELLI CON MANIGLIE



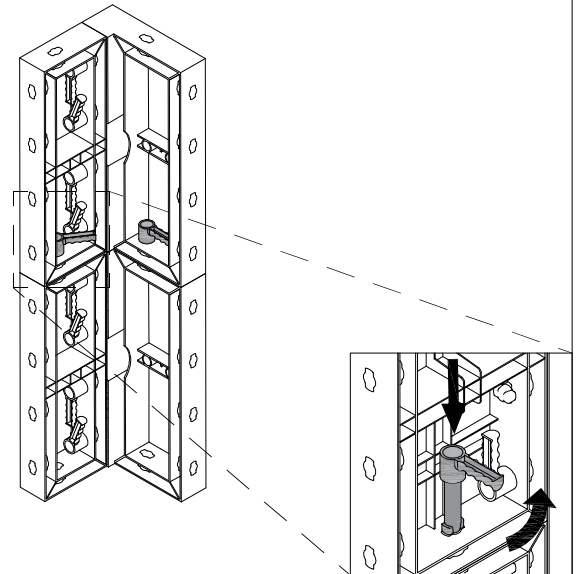
INTERNAL CORNER ASSEMBLING

ASSEMBLAGGIO ANGOLO INTERNO

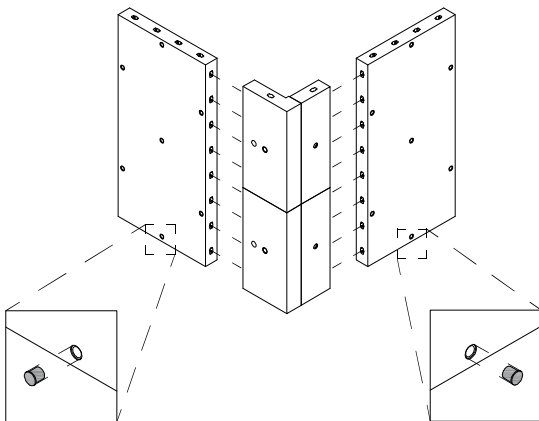
3. SECOND LEVEL PANELS INSTALLATION
INSTALLAZIONE DEL SECONDO LIVELLO DI PANNELLI



4. PANELS FIXING WITH HANDLES
FISSAGGIO PANNELLI CON MANIGLIE

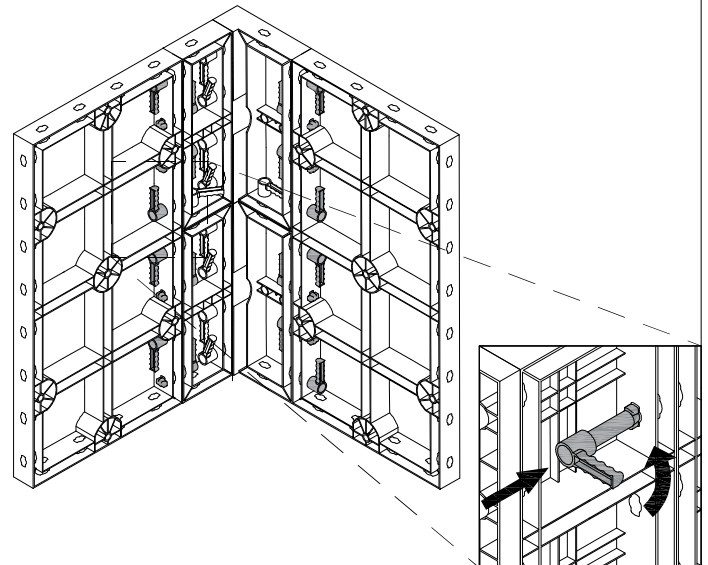


5. GEOPANEL 120X60 INSTALLATION
INSTALLAZIONE GEOPANEL 120X60



WARNING: CLOSE LOWER HOLES OF GEOPANEL 120X60 WITH CAPS Ø 25mm
ATTENZIONE: CHIUDERE I FORI INFERIORI DEI GEOPANEL 120X60 CON TAPPI Ø 25mm

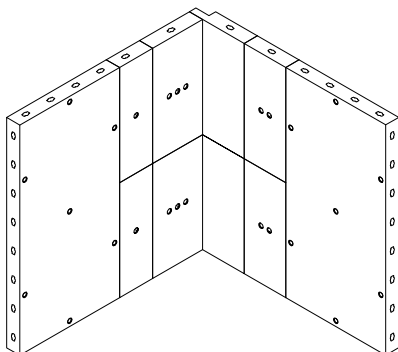
8. PANELS FIXING WITH HANDLES
FISSAGGIO PANNELLI CON MANIGLIE



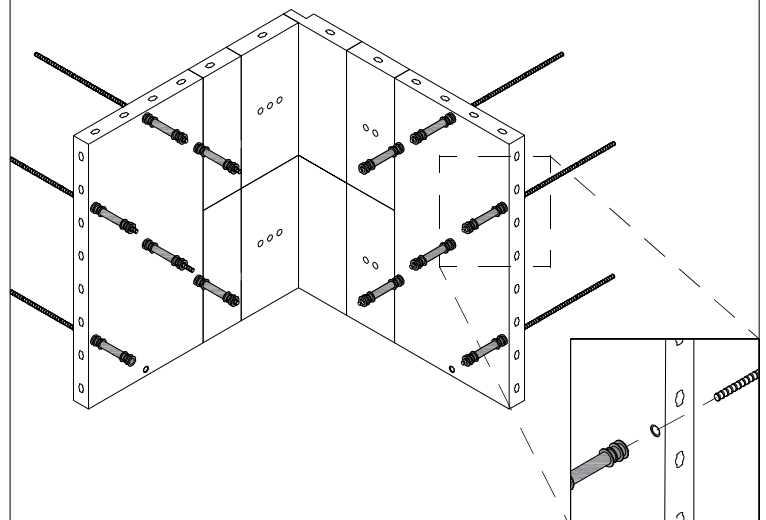
COMPLETE CORNER ASSEMBLING

ASSEMBLAGGIO ANGOLO COMPLETO

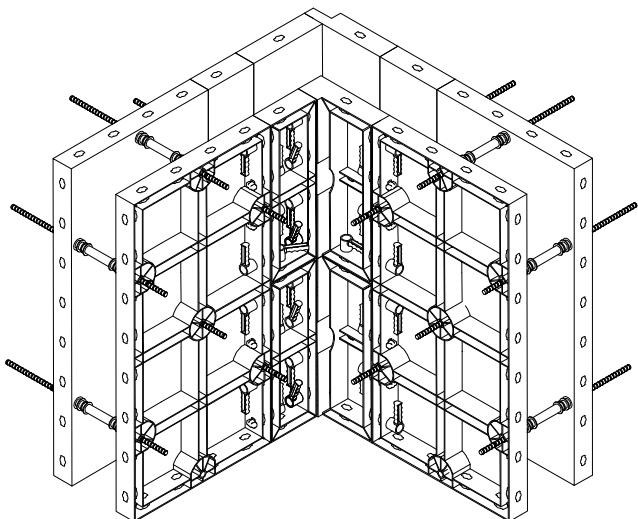
1. EXTERNAL CORNER ASSEMBLING
ASSEMBLAGGIO ANGOLO ESTERNO



2. TIE RODS AND SPACERS INSERTION
INSERIMENTO BARRE RULLATE E DISTANZIATORI

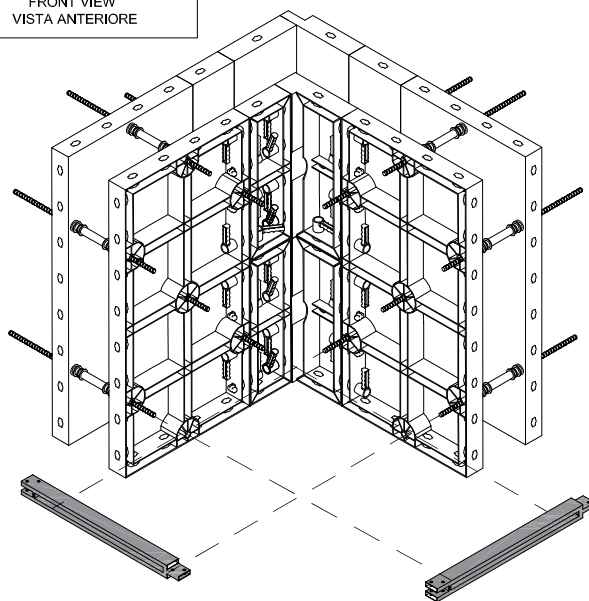


3. INTERNAL CORNER INSTALLATION
INSTALLAZIONE ANGOLO INTERNO

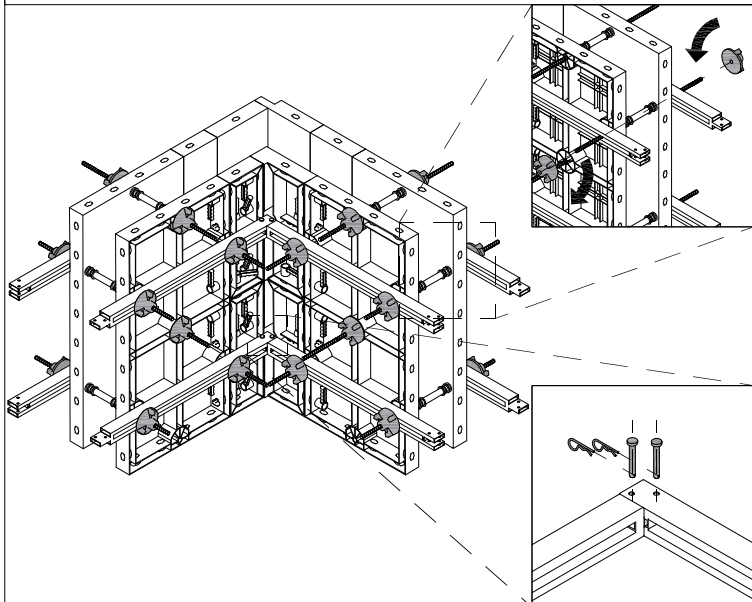


4. ALIGNMENT BARS INSTALLATION
INSTALLAZIONE BARRE ALLINEATRICI

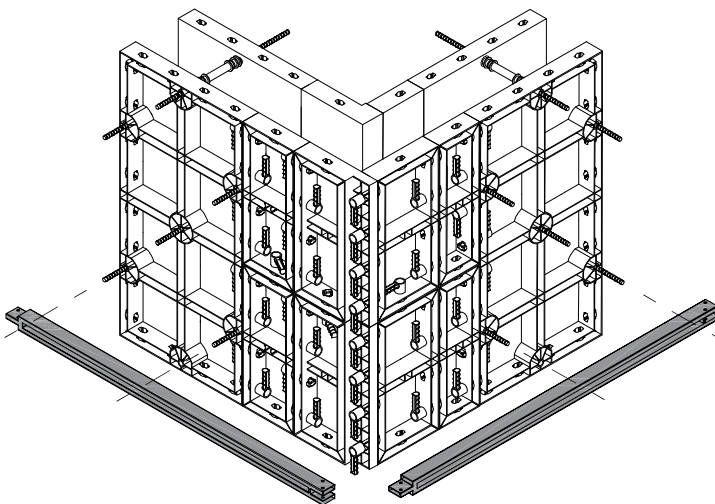
FRONT VIEW
VISTA ANTERIORE



5. ALIGNMENT BARS FIXING
FISSAGGIO BARRE ALLINEATRICI

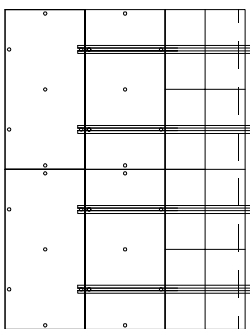


BACK VIEW
VISTA POSTERIORE

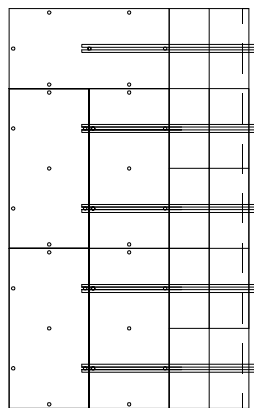


6. GENERAL DISTRIBUTION OF ALIGNMENT BARS
DISTRIBUZIONE GENERALE DELLE BARRE ALLINEATRICI

EXTERNAL VIEW
VISTA ESTERIORE

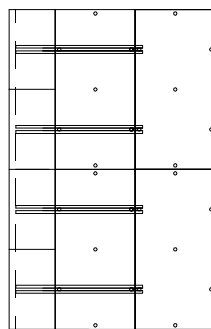


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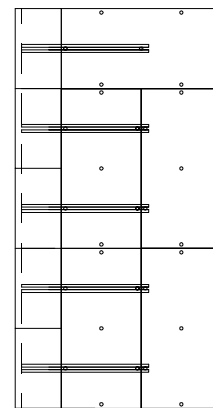


300

INTERNAL VIEW
VISTA INTERIORE



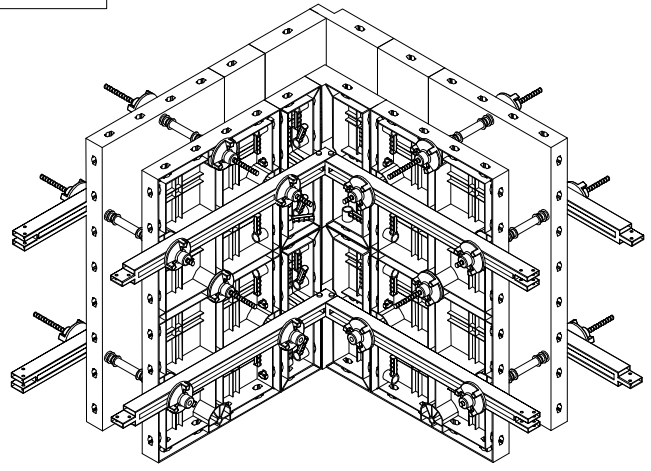
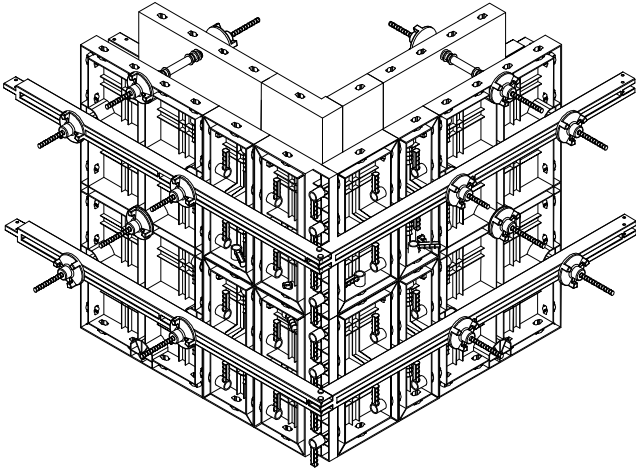
240



300

WARNING: FOR WALL HEIGHTS OVER 3,0 m CONTACT THE TECHNICAL DEPT.
ATTENZIONE: PER MURI CON ALTEZZE MAGGIORI DI 3,0 m CONTATTARE L'UFFICIO TECNICO

FINAL RESULT



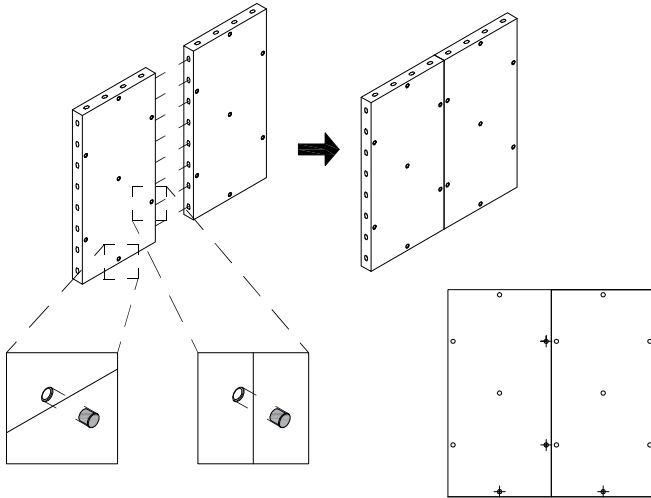
CORNER CONFIGURATIONS

CONFIGURAZIONI D'ANGOLO

WALL THICKNESS (cm)

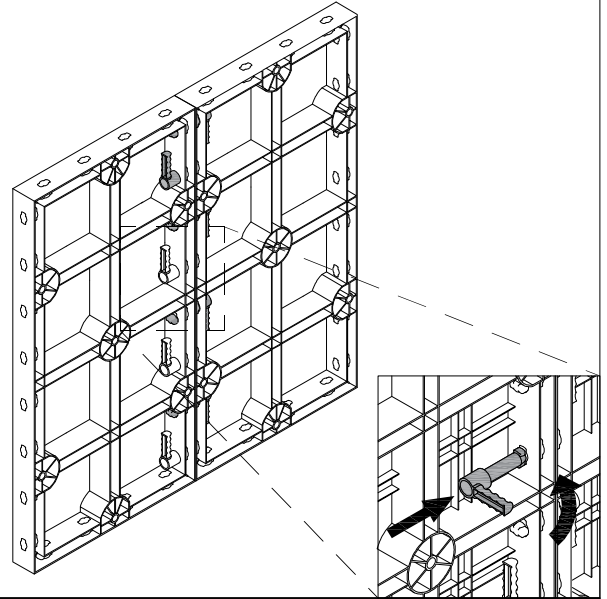
		10	15	20	25	30	35	40
WALL THICKNESS (cm)	10							
	15							
	20							
	25							
	30							
	35							
	40							

1. GEOPANEL 120X60 ASSEMBLING
ASSEMBLAGGIO GEOPANEL 120X60

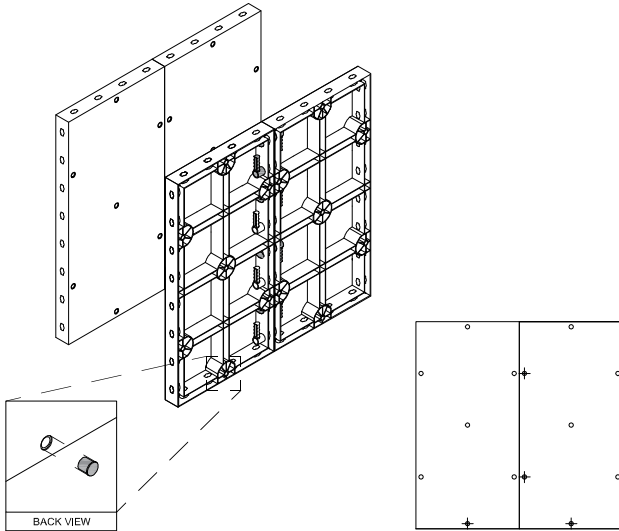


WARNING: CLOSE GEOPANEL 120X60 HOLES WITH CAPS Ø 25mm, AS SHOWN IN FIGURE
ATTENZIONE: CHIUDERE I FORI DEI GEOPANEL 120X60 CON TAPPI Ø 25mm, COME MOSTRATO IN FIGURA

2. PANELS FIXING WITH HANDLES
FISSAGGIO PANNELLI CON MANIGLIE

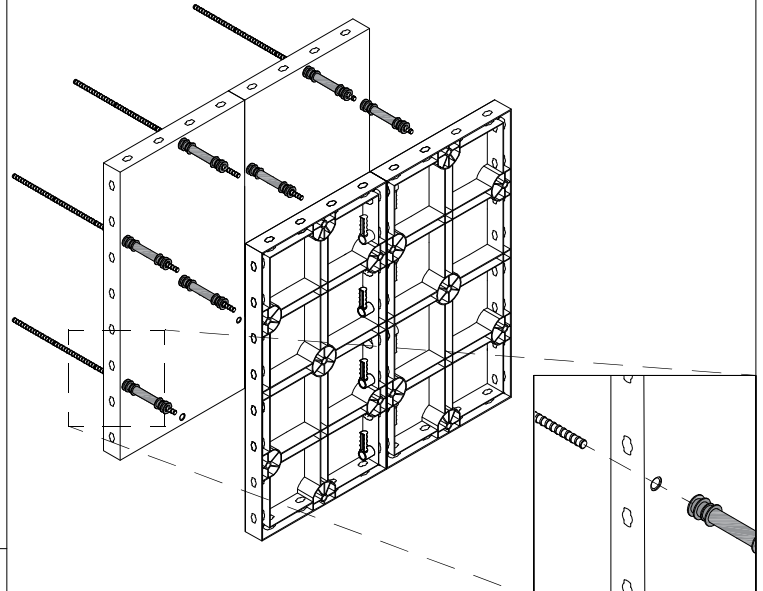


3. GEOPANEL 120X60 ASSEMBLING
ASSEMBLAGGIO GEOPANEL 120X60

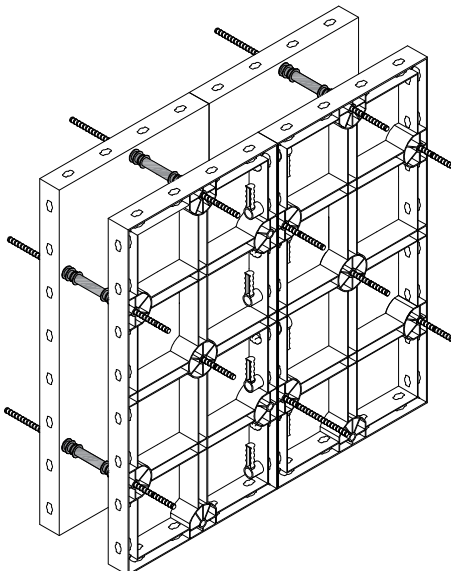


WARNING: CLOSE GEOPANEL 120X60 HOLES WITH CAPS Ø 25mm, AS SHOWN IN FIGURE
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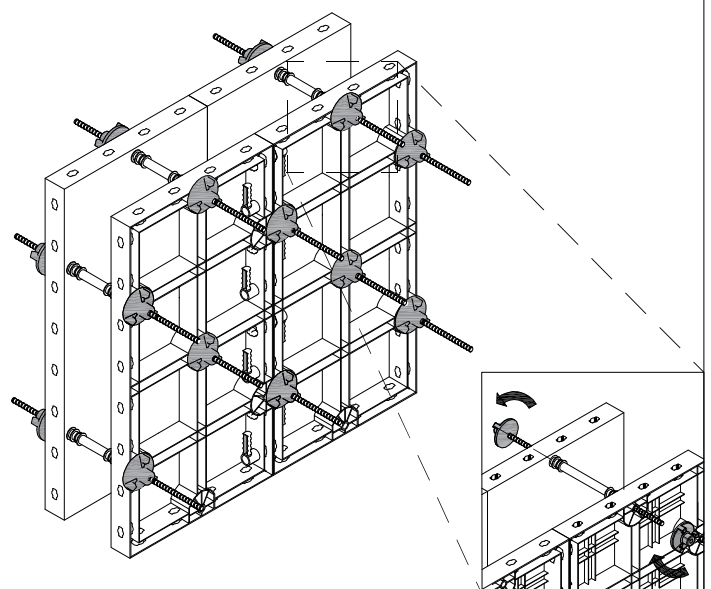
4. TIE RODS AND SPACERS INSERTION
INSERIMENTO BARRE RULLATE E DISTANZIATORI



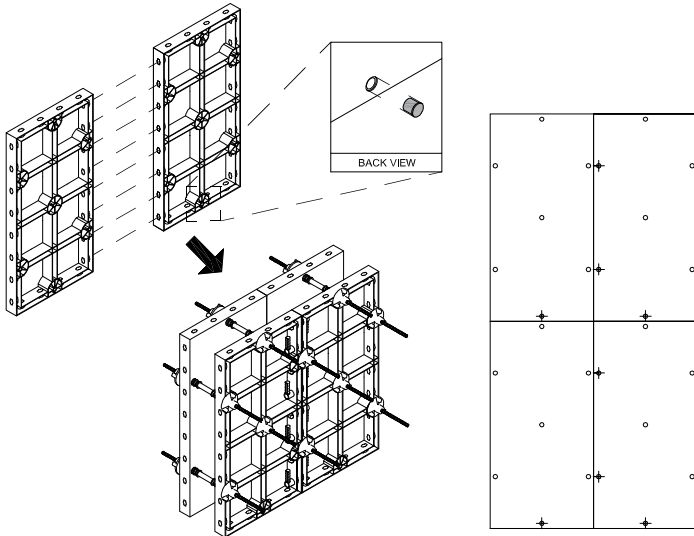
5. GEOPANEL 120X60 ASSEMBLING
ASSEMBLAMENTO GEOPANEL 120X60



6. PANELS FIXING WITH ANCHOR NUTS
FISSAGGIO PANNELLI CON ROSETTE

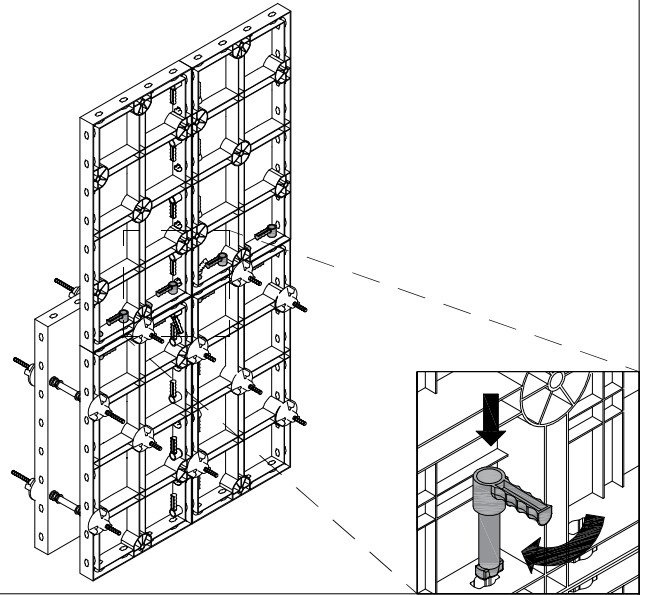


7. SECOND LEVEL OF GEOPANEL 120X60 INSTALLATION
 INSTALLAZIONE SECONDO LIVELLO DI GEOPANEL 120X60

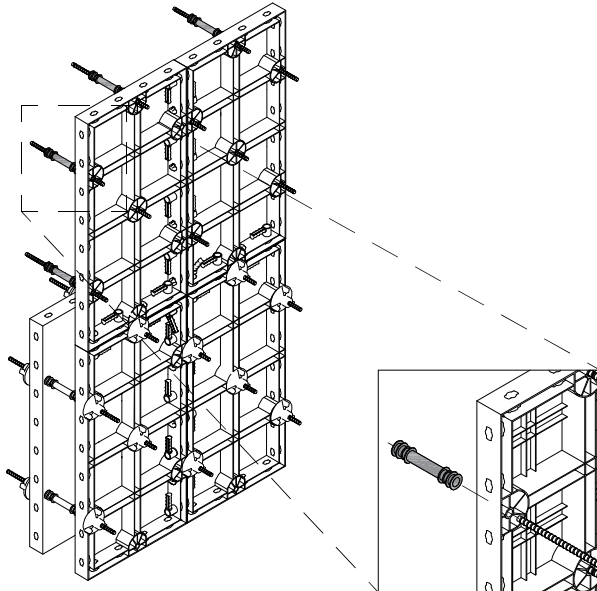


WARNING: CLOSE GEOPANEL 120X60 HOLES WITH CAPS Ø 25mm, AS SHOWN IN FIGURE
 ATTENZIONE: CHIUDERE I FORI DEI GEOPANEL 120X60 CON TAPPI Ø 25mm, COME MOSTRATO IN FIGURA

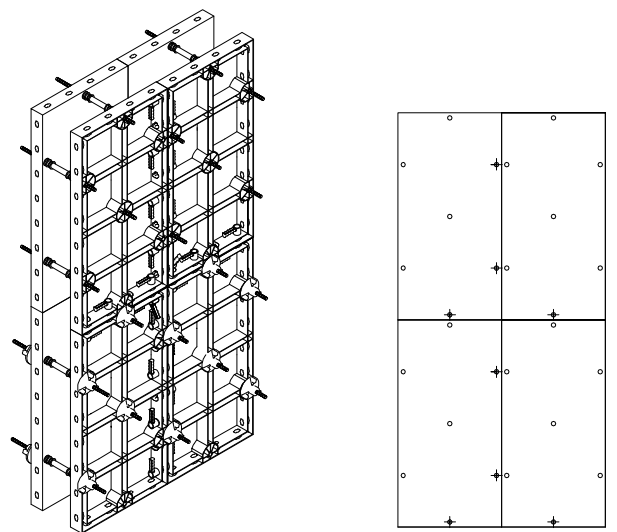
8. PANELS FIXING WITH HANDLES
 FISSAGGIO PANNELLI CON MANIGLIE



9. TIE RODS AND SPACERS INSERTION
 INSERIMENTO BARRE RULLATE E DISTANZIATORI

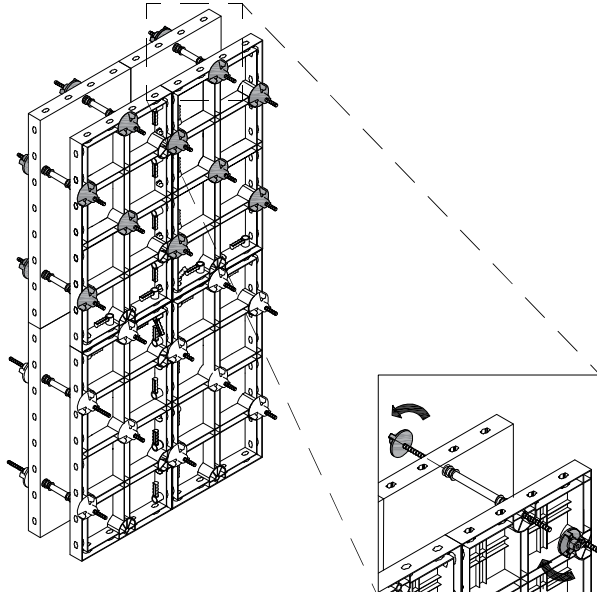


10. GEOPANEL 120X60 INSTALLATION
 INSTALLAZIONE GEOPANEL 120X60

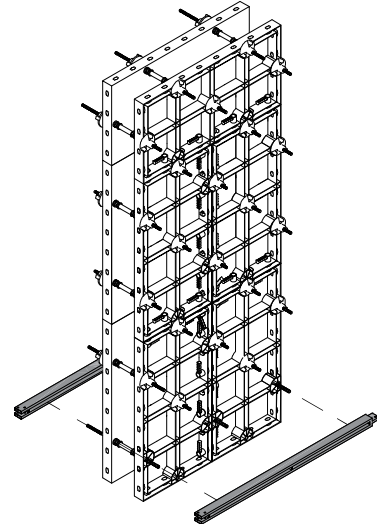


WARNING: CLOSE GEOPANEL 120X60 HOLES WITH CAPS Ø 25mm, AS SHOWN IN FIGURE
 ATTENZIONE: CHIUDERE I FORI DEI GEOPANEL 120X60 CON TAPPI Ø 25mm, COME MOSTRATO IN FIGURA

11. PANELS FIXING WITH ANCHOR NUTS
 FISSAGGIO PANNELLI CON ROSETTE

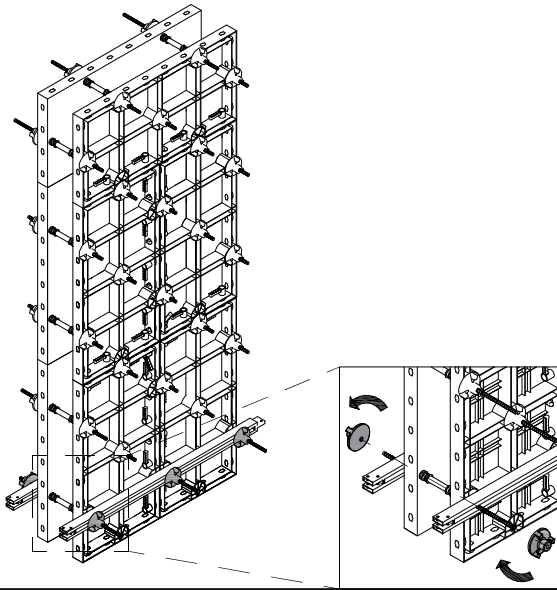


12. ALIGNMENT BARS INSTALLATION
 INSTALLAZIONE BARRE ALLINEATRICI

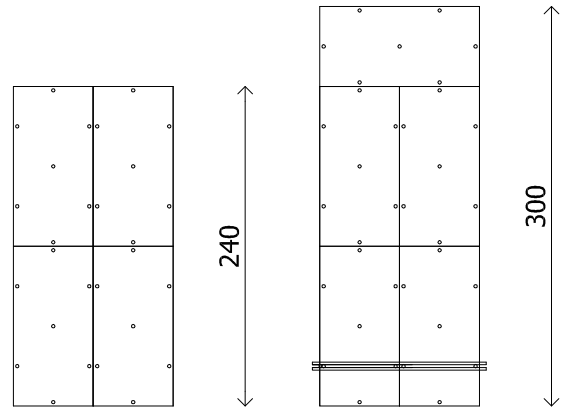


WARNING: FOR WALL HEIGHT OVER 2.40m IS REQUIRED THE INSTALLATION OF ALIGNMENT BARS
 ATTENZIONE: PER MURO CON ALTEZZA MAGGIORE 2.40m E' RICHIESTA L'INSTALLAZIONE DI BARRE ALLINEATRICI

13. ALIGNMENT BARS FIXING
FISSAGGIO BARRE ALLINEATRICI

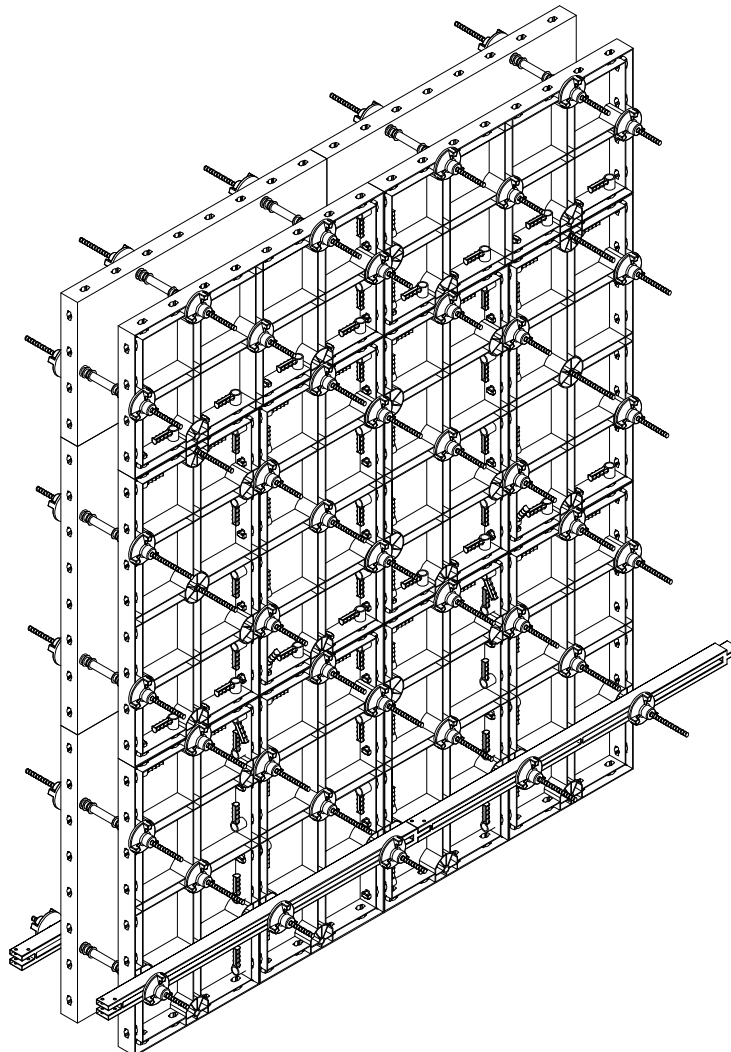


14. GENERAL DISTRIBUTION OF ALIGNMENT BARS
DISTRIBUZIONE GENERALE DELLE BARRE ALLINEATRICI

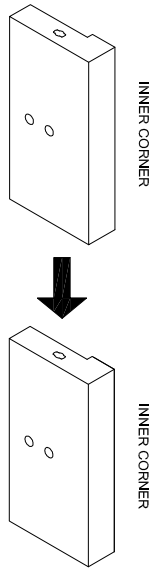


WARNING: FOR WALL HEIGHTS OVER 3.0 m CONTACT THE TECHNICAL DEPT.
ATTENZIONE: PER MURI CON ALTEZZE MAGGIORI DI 3.0 m CONTATTARE L'UFFICIO TECNICO

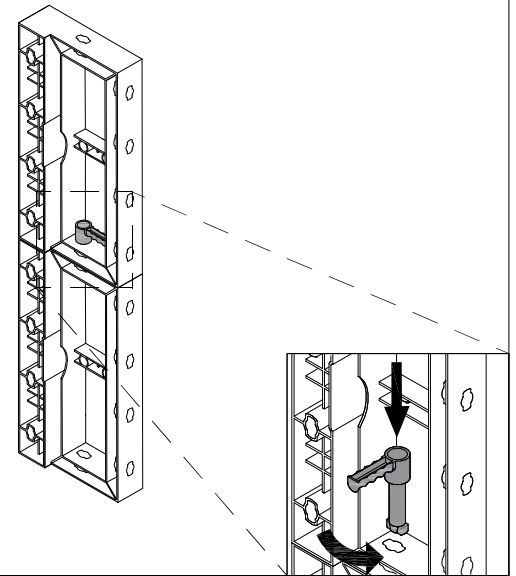
FINAL RESULT



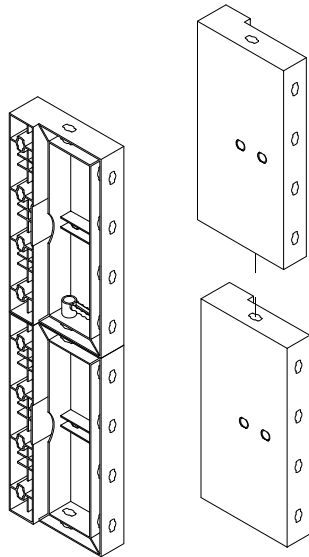
1. INTERNAL CORNER ASSEMBLING
ASSEMBLAGGIO ANGOLO INTERNO



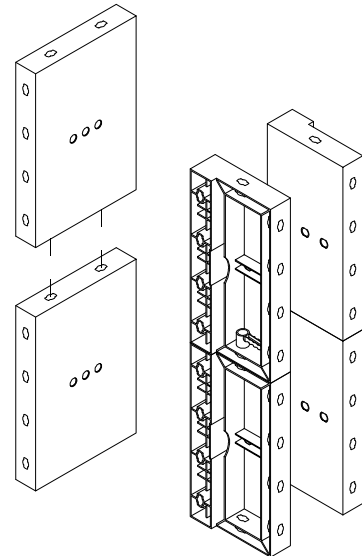
2. PANELS FIXING WITH HANDLES
FISSAGGIO PANNELLI CON MANIGLIE



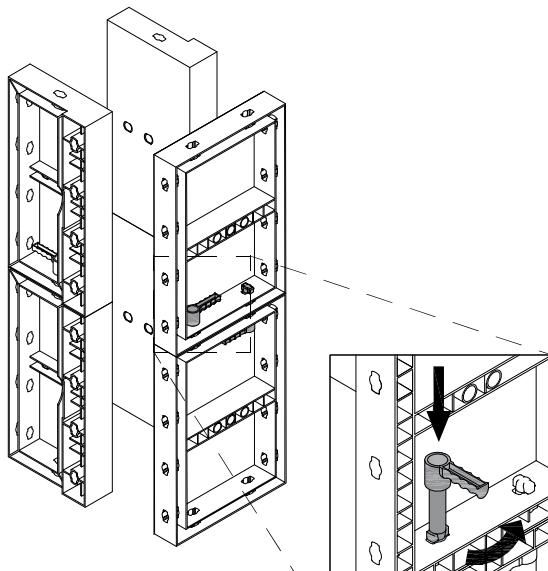
3. SECOND INTERNAL CORNER INSTALLATION
INSTALLAZIONE DEL SECONDO ANGOLO INTERNO



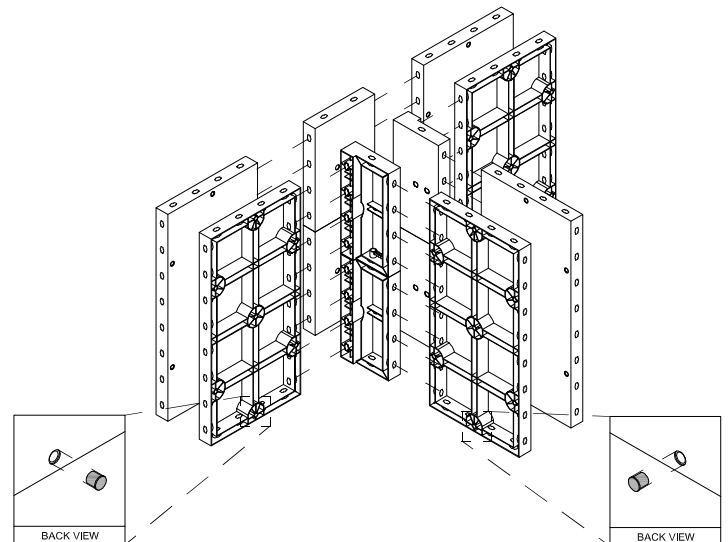
4. LINEAR ELEMENTS INSTALLATION
INSTALLAZIONE ELEMENTI LINEARI



5. PANELS FIXING WITH HANDLES
FISSAGGIO PANNELLI CON MANIGLIE

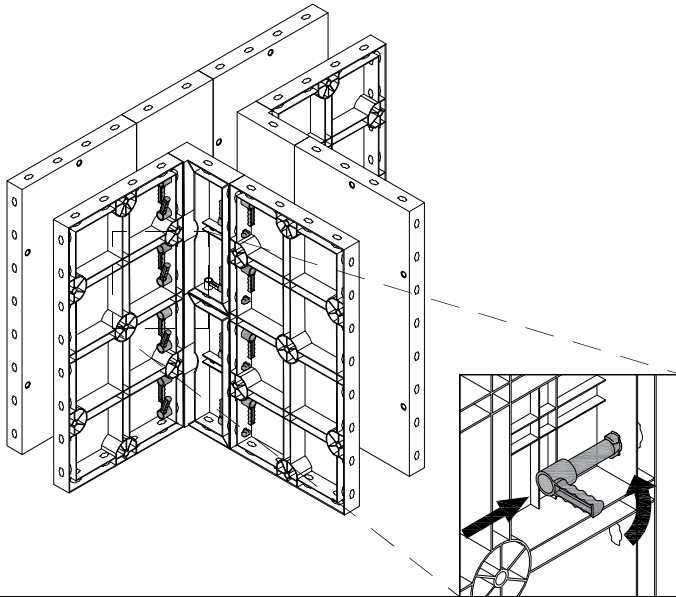


6. GEOPANEL 120X60 INSTALLATION
INSTALLAZIONE GEOPANEL 120X60

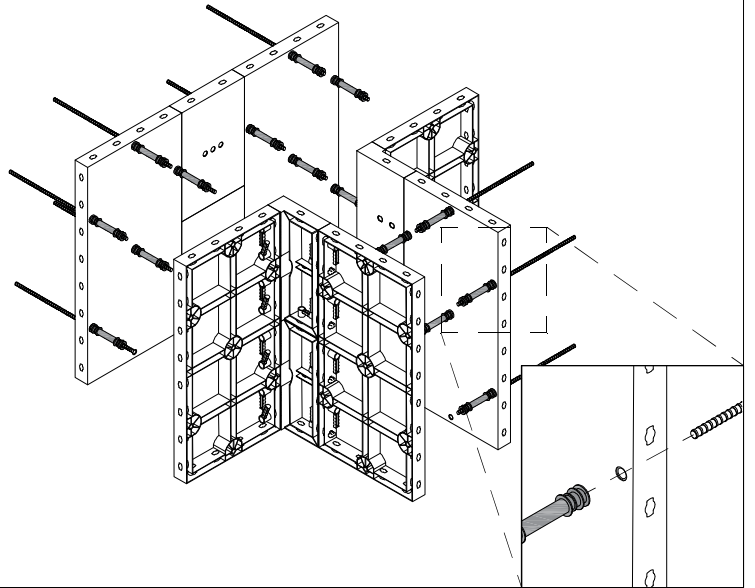


WARNING: CLOSE LOWER HOLES OF GEOPANEL 120X60 WITH CAPS Ø 25mm
ATTENZIONE: CHIUDERE I FORI INFERIORI DEI GEOPANEL 120X60 CON TAPPI Ø 25mm

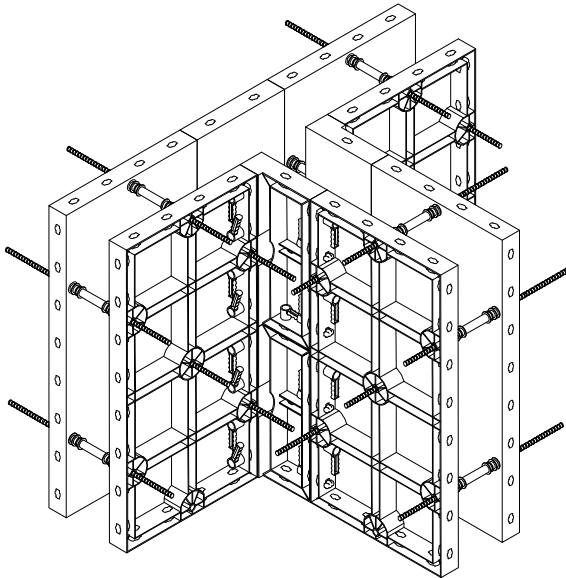
7. PANELS FIXING WITH HANDLES
FISSAGGIO PANNELLI CON MANIGLIE



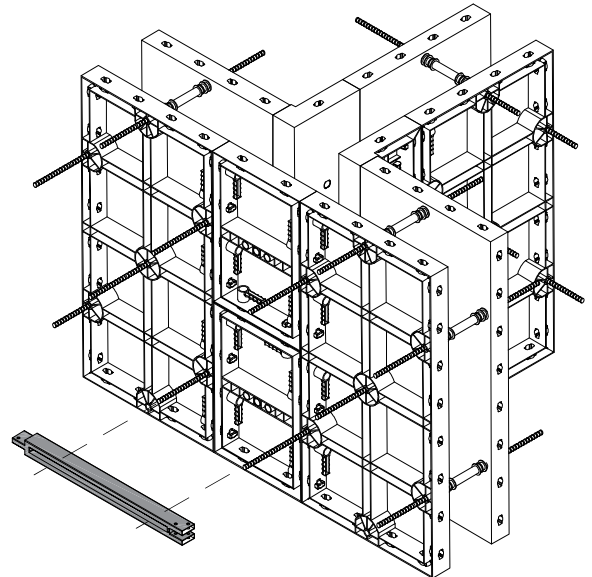
8. TIE RODS AND SPACERS INSERTION
INSERIMENTO BARRE RULLATE E DISTANZIATORI



9. INTERNAL CORNERS POSITIONING
POSIZIONAMENTO ANGOLI INTERNI



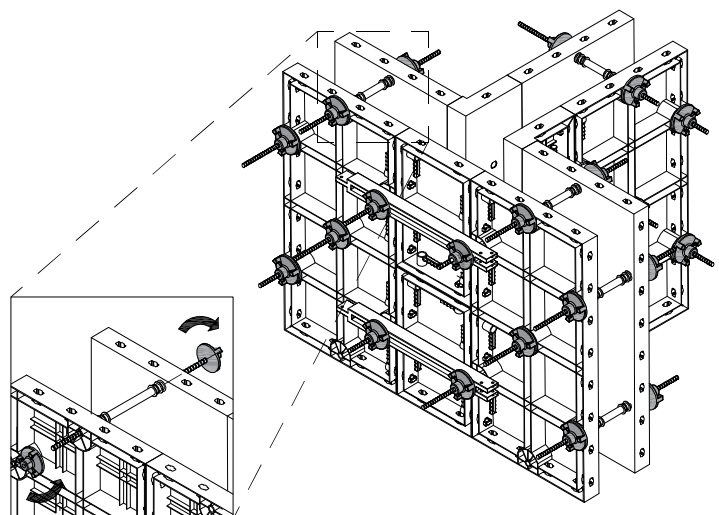
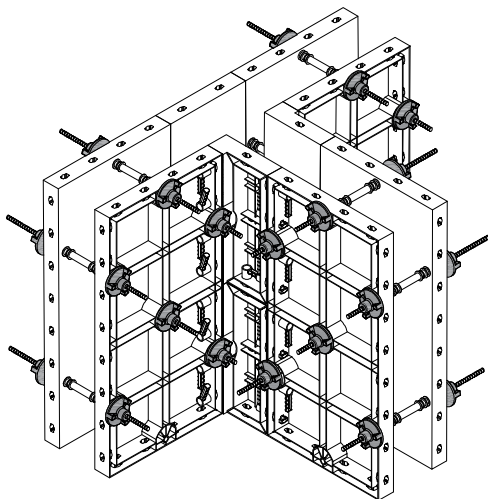
10. ALIGNMENT BARS INSTALLATION
INSTALLAZIONE BARRE ALLINEATRICI



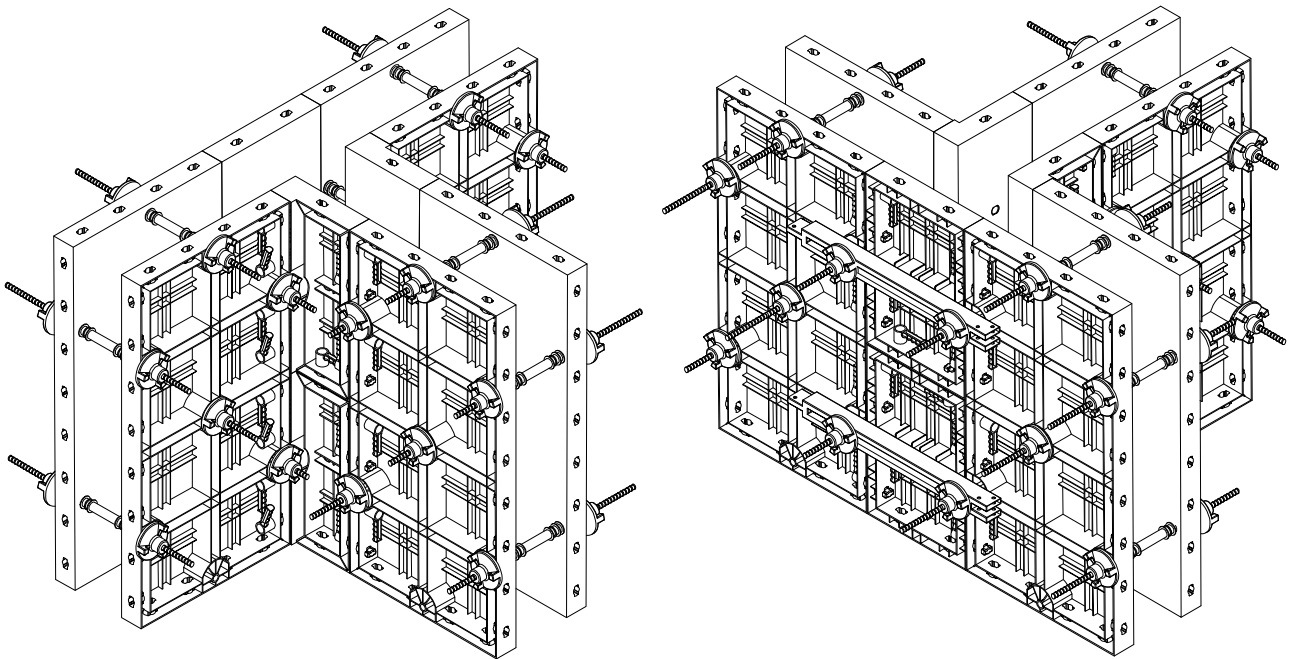
11. ANCHOR NUTS INSTALLATION
INSTALLAZIONE ROSETTE

FRONT VIEW
VISTA ANTERIORE

BACK VIEW
VISTA POSTERIORE

















FINAL RESULT



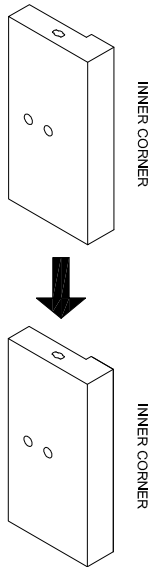
"T" INTERSECTION CONFIGURATIONS

CONFIGURAZIONI INTERSEZIONI A "T"

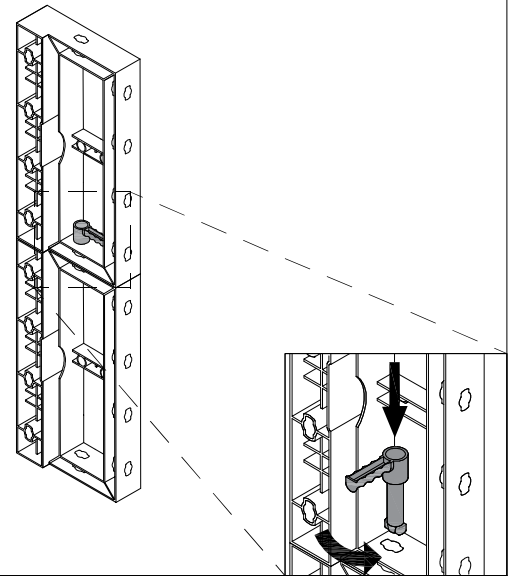
		WALL THICKNESS (cm)						
		10	15	20	25	30	35	40
T								
								

CROSS INTERSECTION ASSEMBLING ASSEMBLAGGIO INTERSEZIONE A CROCE

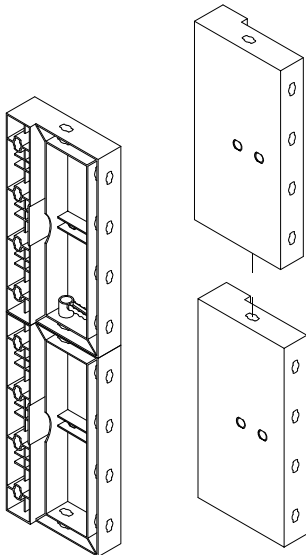
1. INTERNAL CORNER ASSEMBLING
ASSEMBLAGGIO ANGOLO INTERNO



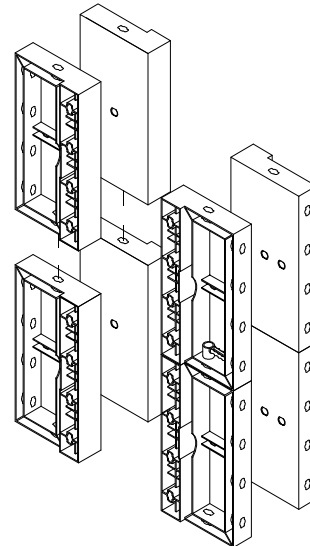
2. PANELS FIXING WITH HANDLES
FISSAGGIO PANNELLI CON MANIGLIE



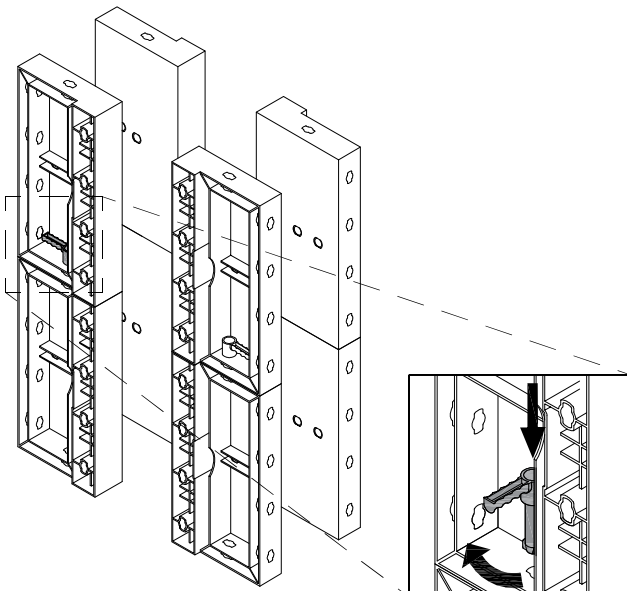
3. SECOND INTERNAL CORNER INSTALLATION
INSTALLAZIONE DEL SECONDO ANGOLO INTERNO



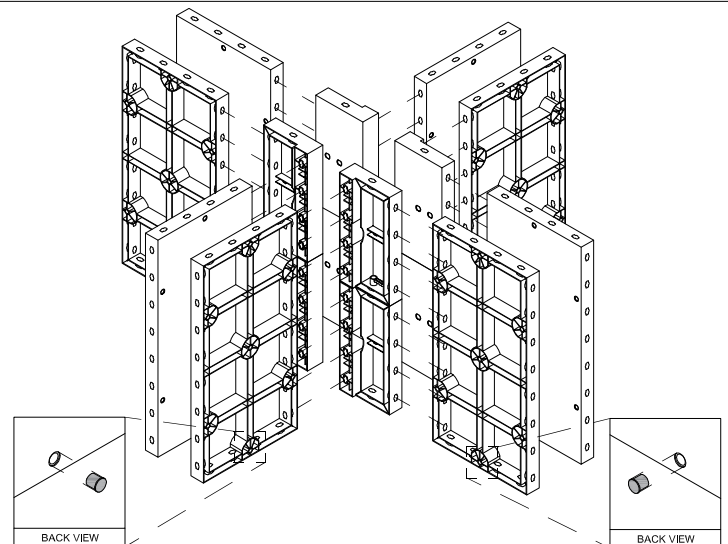
4. OPPOSITE INTERNAL CORNERS INSTALLATION
INSTALLAZIONE ANGOLI INTERNI OPPOSTI



5. PANELS FIXING WITH HANDLES
FISSAGGIO PANNELLI CON MANIGLIE



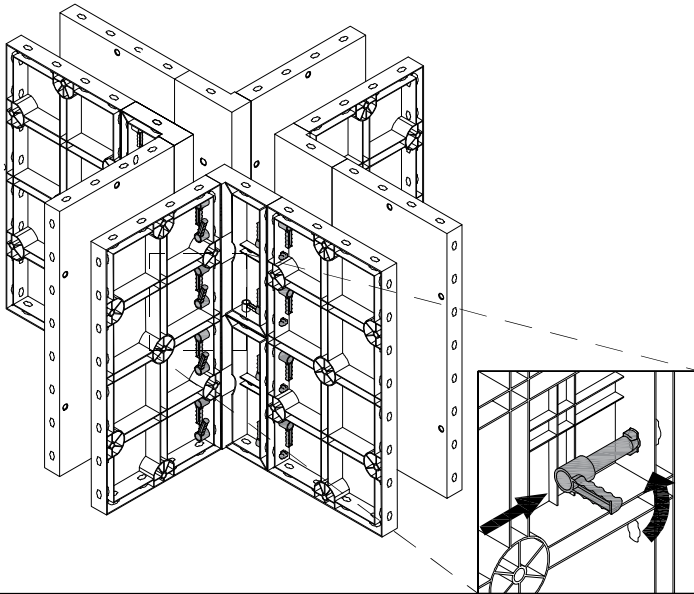
6. GEOPANEL 120X60 INSTALLATION
INSTALLAZIONE GEOPANEL 120X60



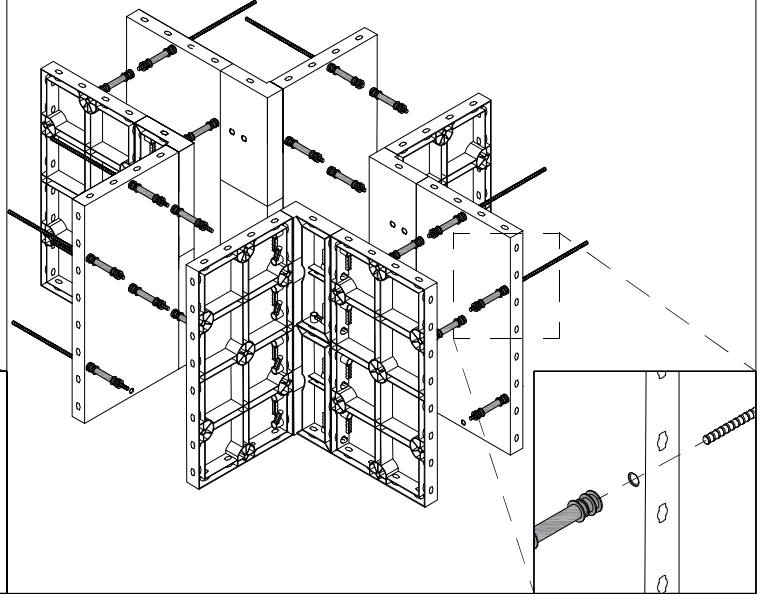
WARNING: CLOSE LOWER HOLES OF GEOPANEL 120X60 WITH CAPS Ø 25mm
ATTENZIONE: CHIUDERE I FORI INFERIORI DEI GEOPANEL 120X60 CON TAPPI Ø 25mm

CROSS INTERSECTION ASSEMBLING ASSEMBLAGGIO INTERSEZIONE A CROCE

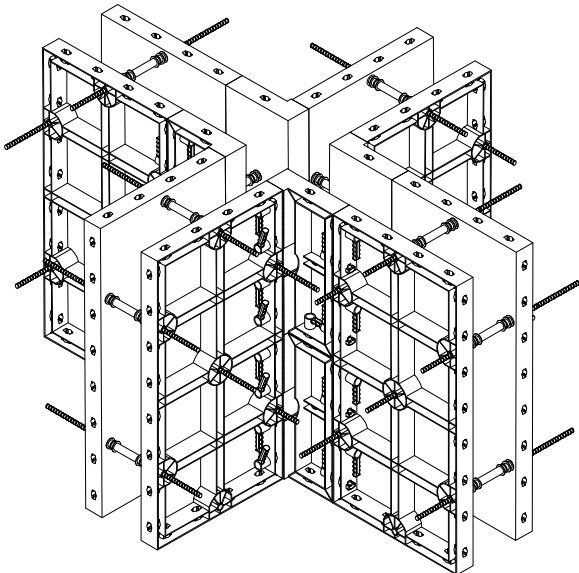
7. PANELS FIXING WITH HANDLES
FISSAGGIO PANNELLI CON MANIGLIE



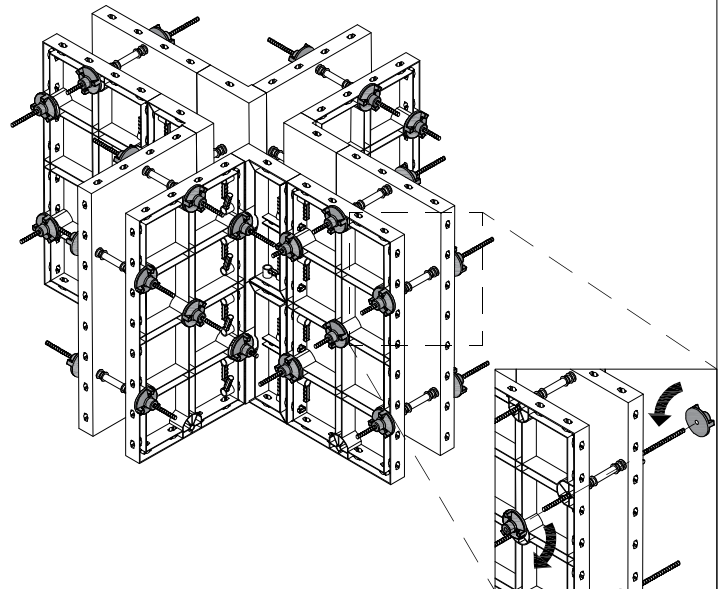
8. TIE RODS AND SPACERS INSERTION
INSERIMENTO BARRE RULLATE E DISTANZIATORI



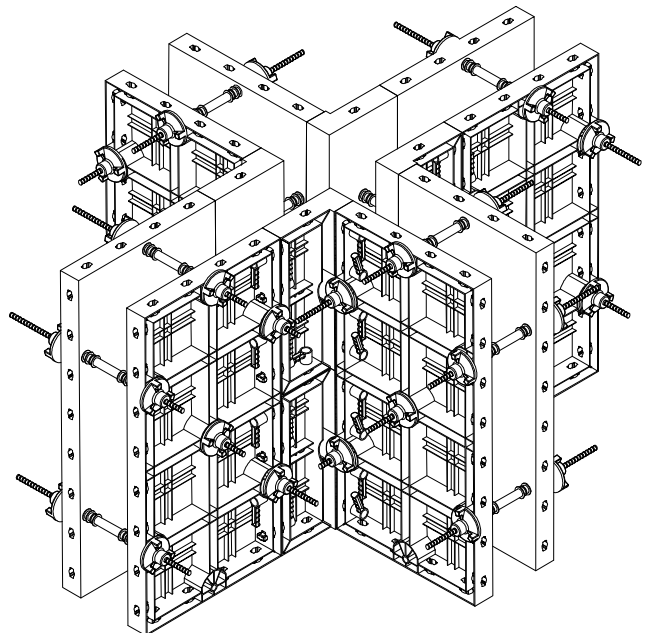
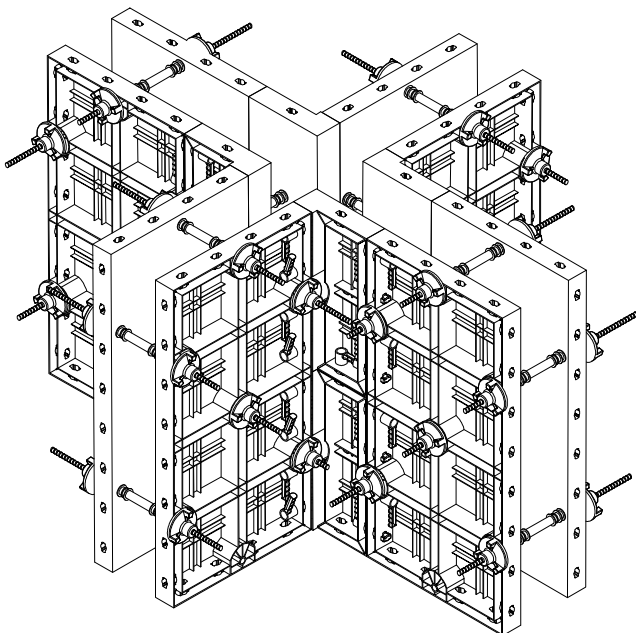
9. INTERNAL CORNERS INSTALLATION
INSTALLAZIONE ANGOLI INTERNI



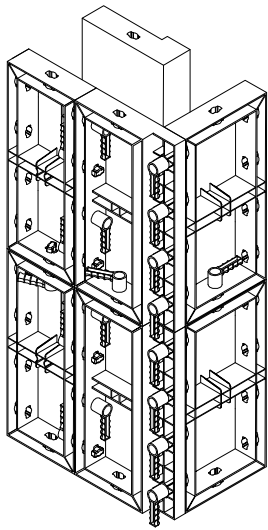
10. ANCHOR NUTS INSTALLATION
INSTALLAZIONE ROSETTE



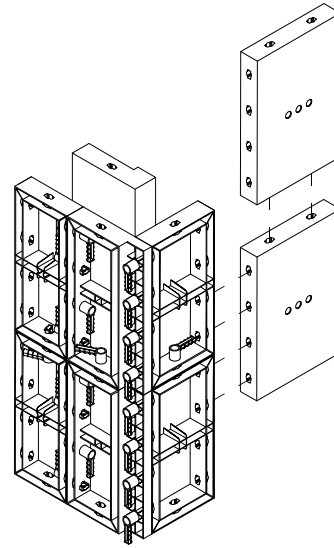
FINAL RESULT



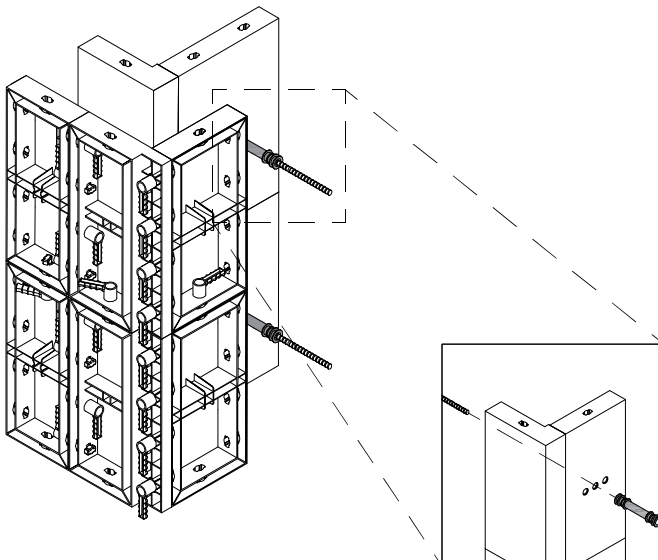
1. FIRST CORNER ASSEMBLING
ASSEMBLAGGIO PRIMO ANGOLO



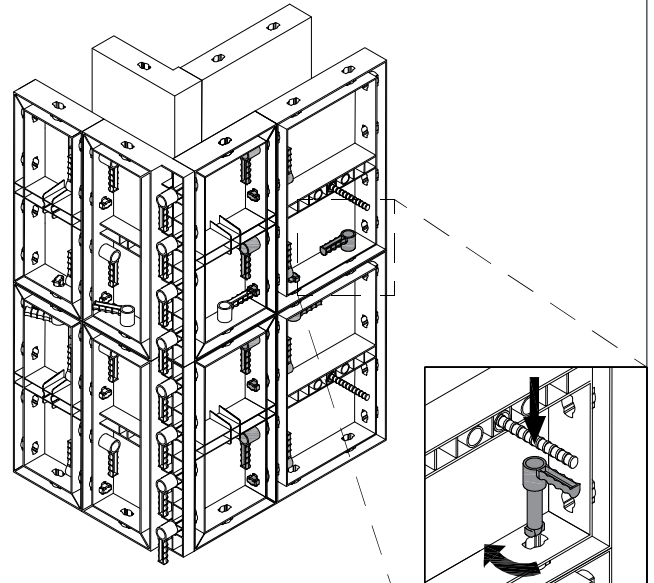
2. FIRST PANELS SIDE ASSEMBLING
ASSEMBLAGGIO PRIMO LATO DI PANNELLI



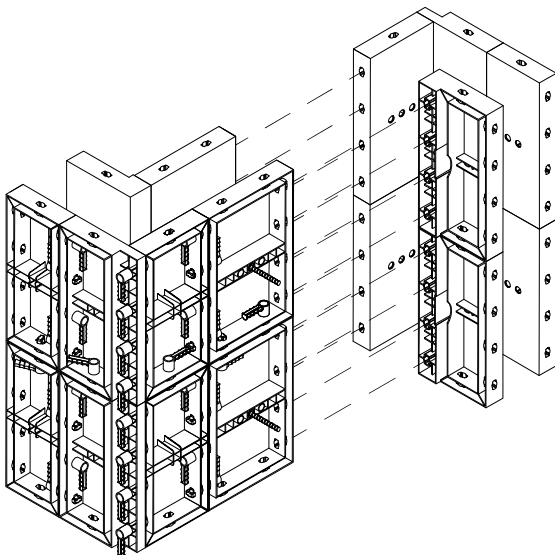
3. TIE RODS AND SPACERS INSERTION
INSERIMENTO BARRE RULLATE E DISTANZIATORI



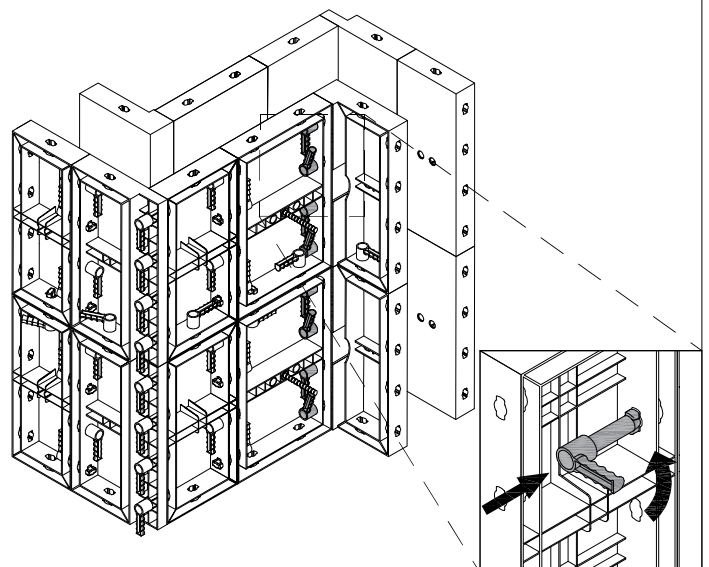
4. SECOND PANELS SIDE ASSEMBLING
ASSEMBLAGGIO SECONDO LATO DI PANNELLI



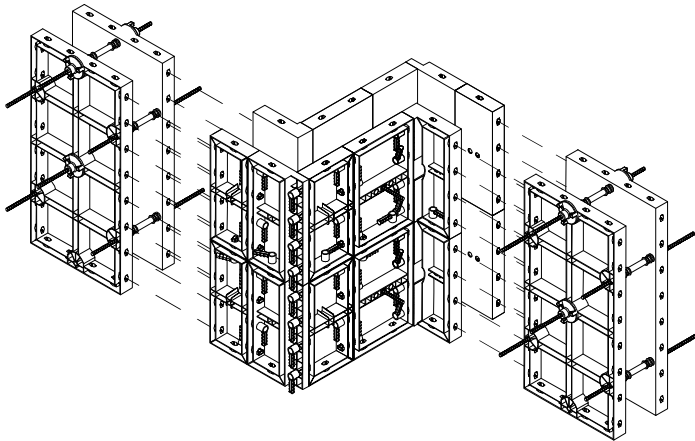
5. SECOND CORNER ASSEMBLING
ASSEMBLAGGIO SECONDO ANGOLO



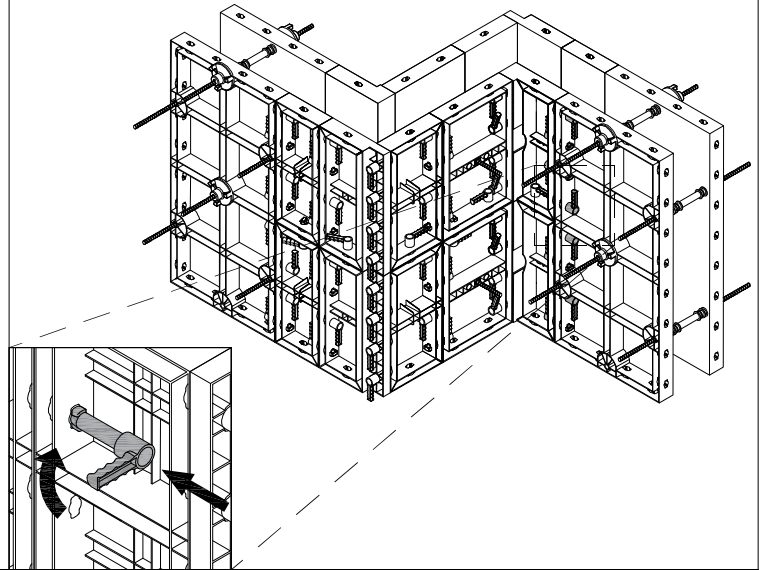
6. FIXING PANELS WITH HANDLES
FISSAGGIO PANNELLI CON MANIGLIE



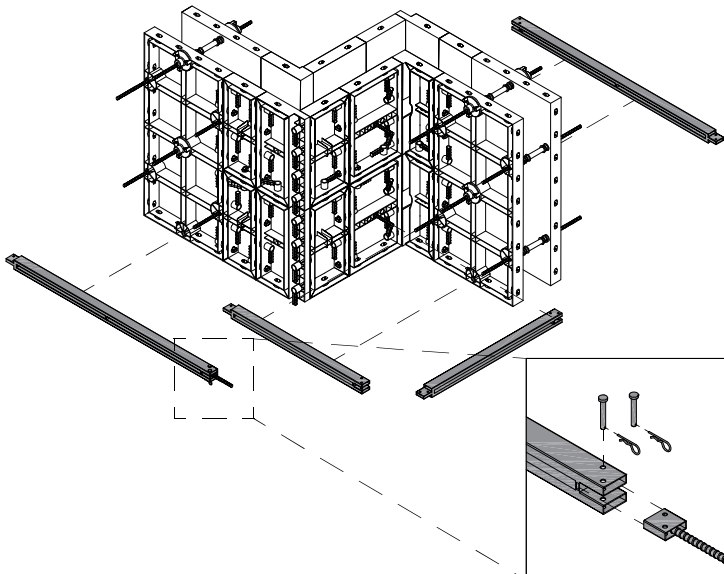
7. WALLS ASSEMBLING
ASSEMBLAGGIO MURI



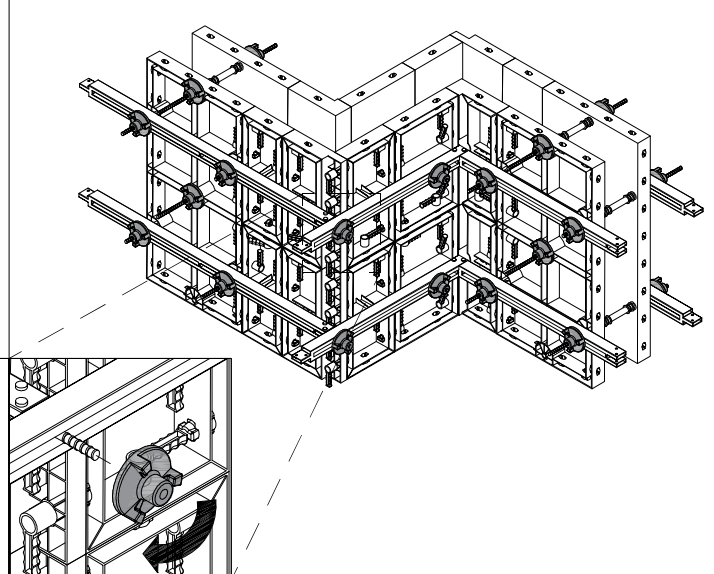
8. PANELS FIXING WITH HANDLES
FISSAGGIO PANNELLI CON MANIGLIE



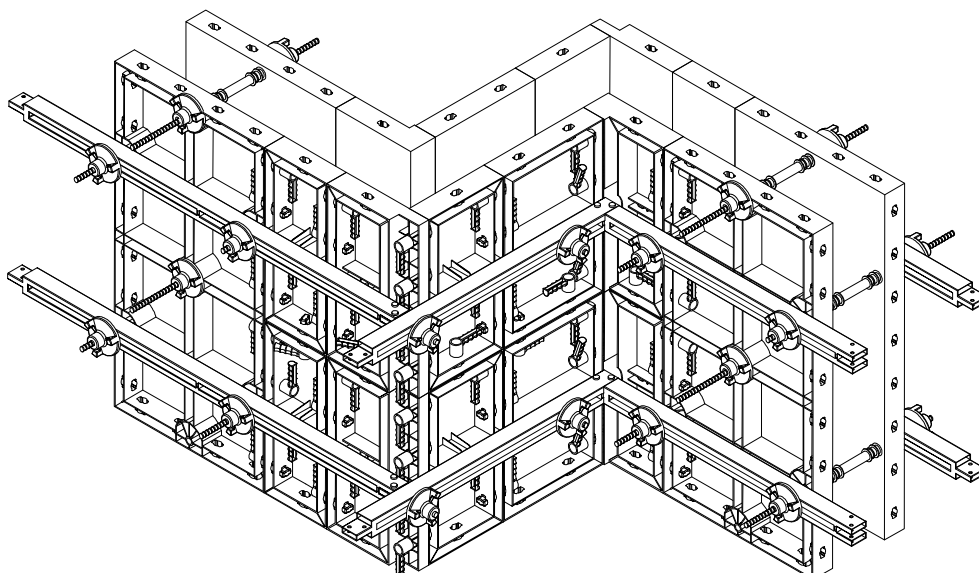
9. ALIGNMENT BARS INSTALLATION
INSTALLAZIONE BARRE ALLINEATRICI



10. ANCHOR NUTS INSTALLATION
INSTALLAZIONE ROSETTE



FINAL RESULT

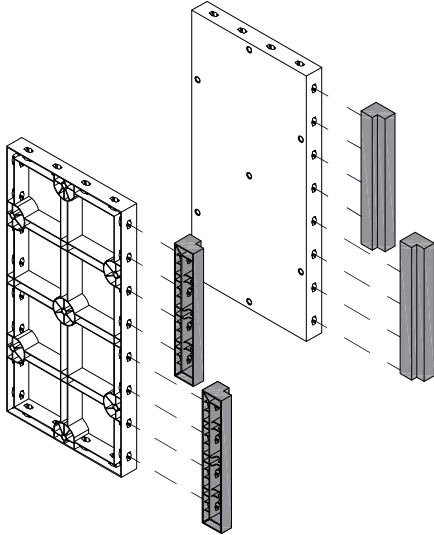


COMPENSATIONS WITH GEOPANEL WP - COMPENSAZIONI CON GEOPANEL WP

COMPENSATIONS FOR GAPS OVER 21cm

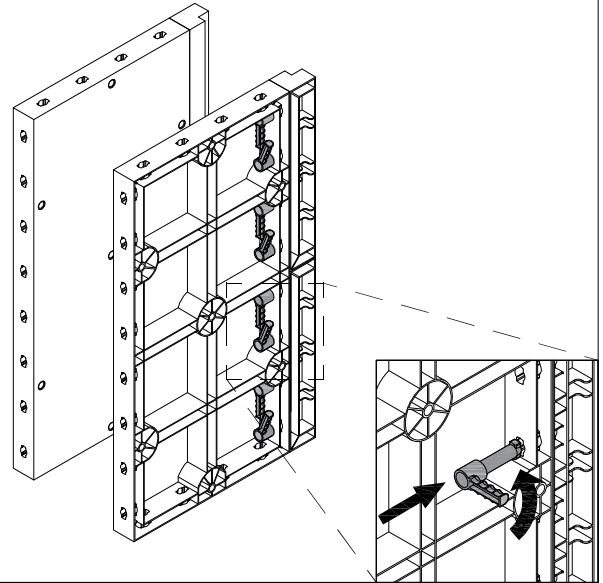
COMPENSAZIONI PER APERTURE MAGGIORI DI 21cm

1. GEOPANEL WP ASSEMBLING ASSEMBLAGGIO GEOPANEL WP

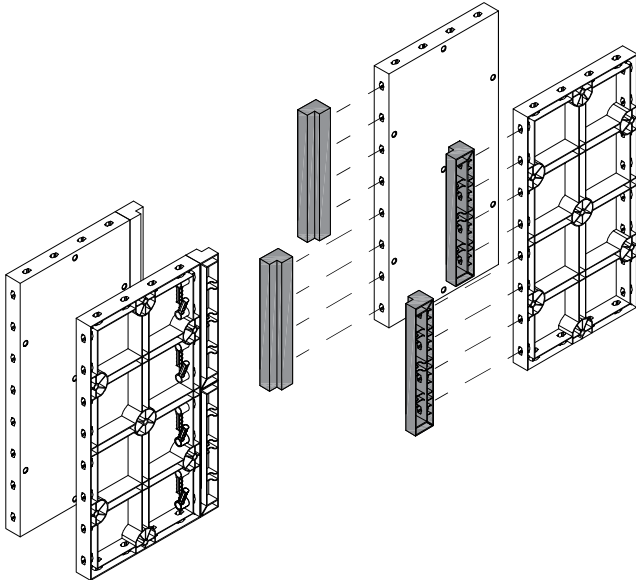


WARNING: CLOSE LOWER HOLES OF GEOPANEL 120X60 WITH CAPS Ø 25mm
ATTENZIONE: CHIUDERE I FORI INFERIORI DEI GEOPANEL 120X60 CON TAPPI Ø 25mm

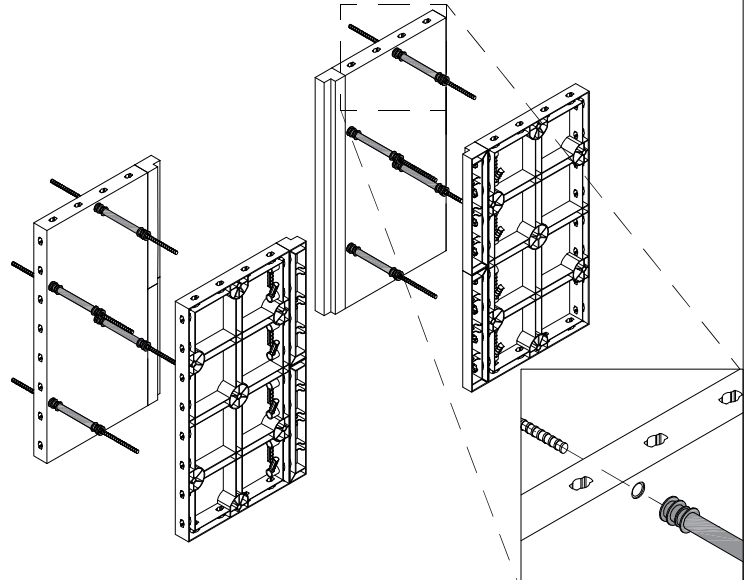
2. PANELS FIXING WITH HANDLES FISSAGGIO PANNELLI CON MANIGLIE



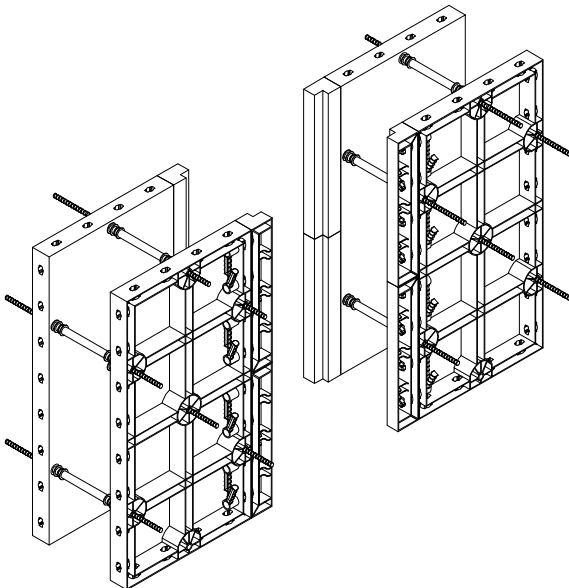
3. WP INSTALLATION ON SECOND WALL INSTALLAZIONE WP SUL SECONDO MURO



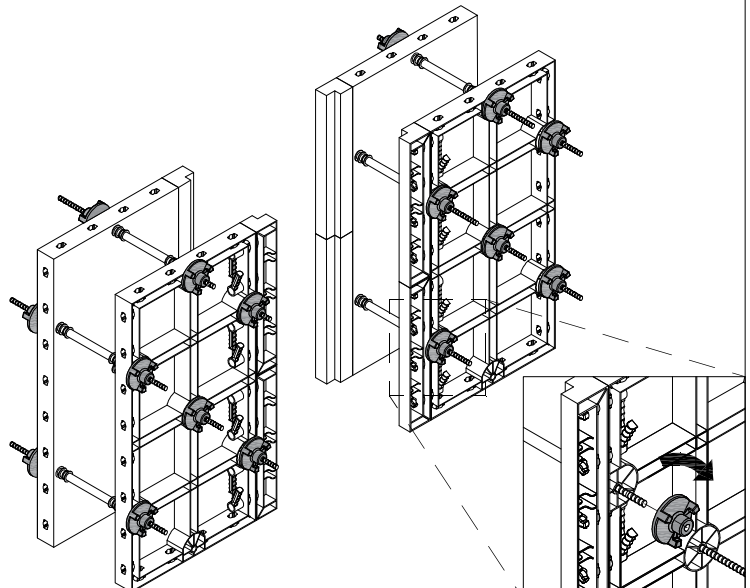
4. TIE RODS AND SPACERS INSERTION INSERIMENTO BARRE RULLATE E DISTANZIATORI



5. PANELS ASSEMBLING ASSEMBLAGGIO PANNELLI



6. ANCHOR NUTS INSTALLATION INSTALLAZIONE ROSETTE

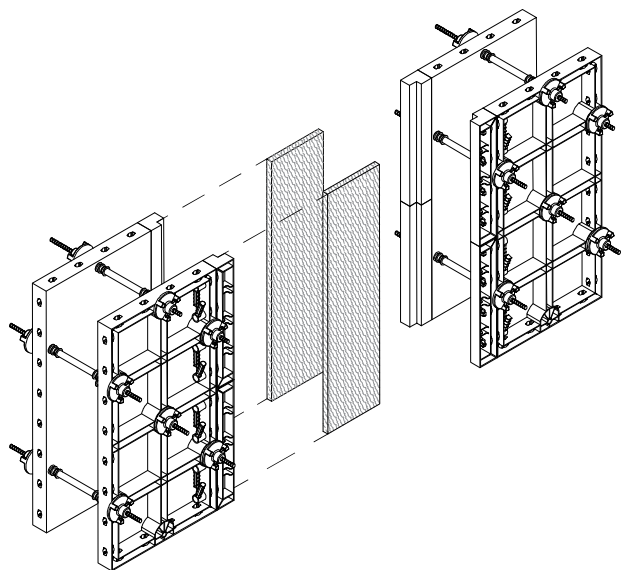


COMPENSATIONS WITH GEOPANEL WP - COMPENSAZIONI CON GEOPANEL WP

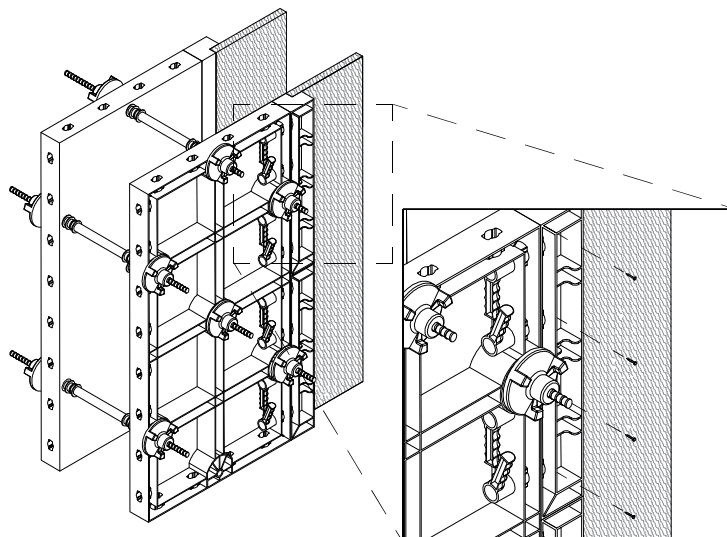
COMPENSATIONS FOR GAPS OVER 21cm

COMPENSAZIONI PER APERTURE MAGGIORI DI 21cm

7. INSTALLATION OF WOODEN COMPENSATIONS
INSTALLAZIONE DELLE COMPENSAZIONI IN LEGNO

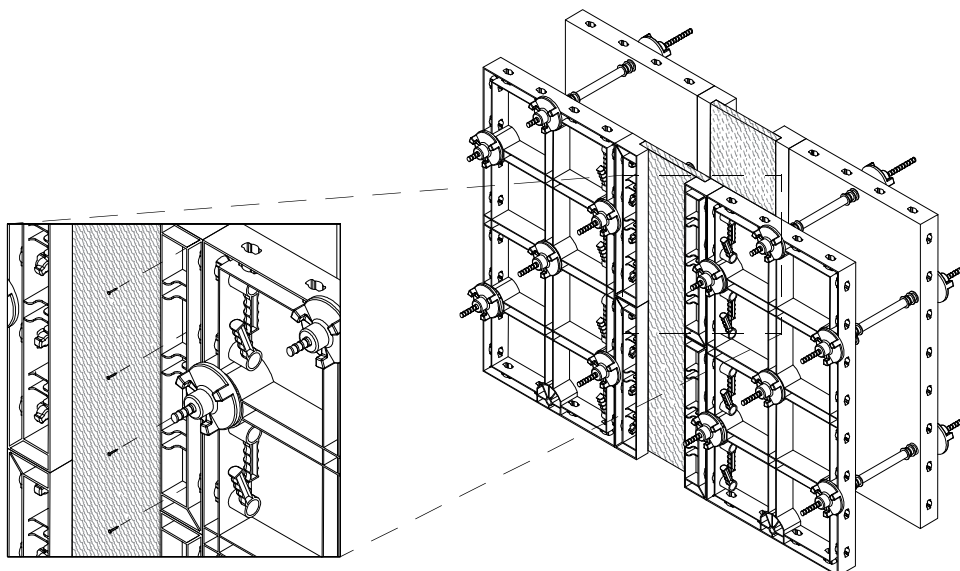


8. COMPENSATIONS FIXING WITH SCREWS
FISSAGGIO COMPENSAZIONI CON VITI

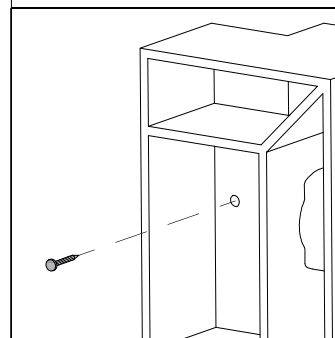


WARNING: IT'S RECOMMENDED TO USE SELF THREADING SCREWS (Ø 4mm; h=25mm)
ATTENZIONE: E' CONSIGLIATO UTILIZZARE VITI AUTOFILETTANTI (Ø 4mm; h=25mm)

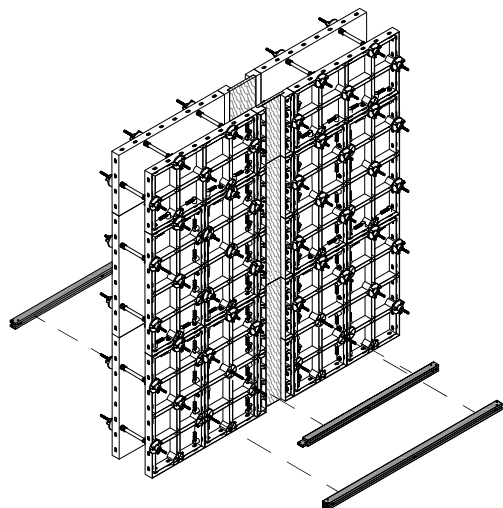
9. COMPENSATIONS FIXING WITH SCREWS
FISSAGGIO COMPENSAZIONI CON VITI



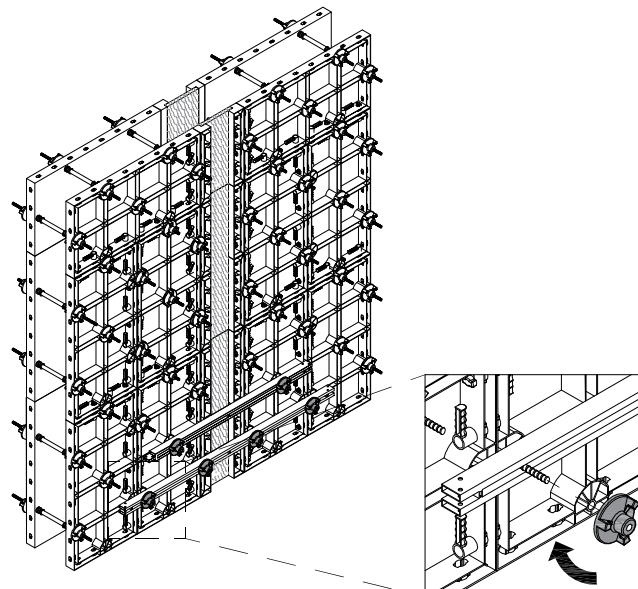
SCREWS APPLICATION DETAIL



10. ALIGNMENT BARS INSTALLATION
INSTALLAZIONE BARRE ALLINEATRICI

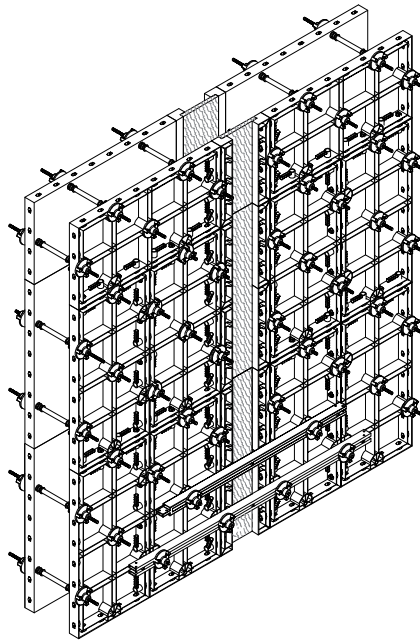


11. ALIGNMENT BARS FIXING
FISSAGGIO BARRE ALLINEATRICI



WARNING: FOR WALL HEIGHT OVER 2.40m IS REQUIRED THE INSTALLATION OF ALIGNMENT BARS
ATTENZIONE: PER MURO CON ALTEZZA MAGGIORE 2.40m E' RICHIESTA L'INSTALLAZIONE DI BARRE ALLINEATRICI

FINAL RESULT

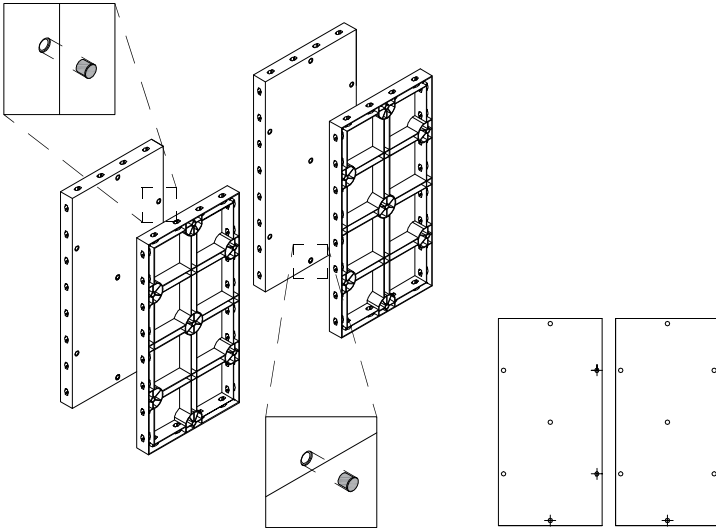


WOODEN COMPENSATIONS - COMPENSAZIONI IN LEGNO

COMPENSATIONS FOR GAPS UNDER 6.5cm

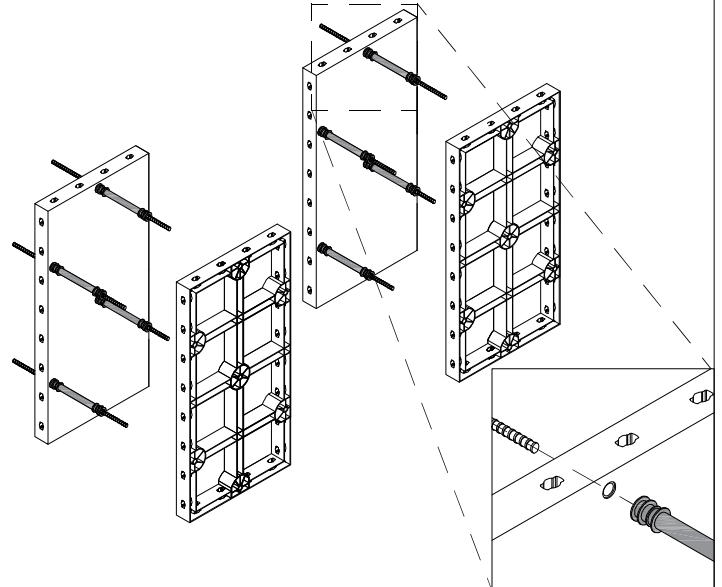
COMPENSAZIONI PER APERTURE MINORI DI 6.5cm

1. GEOPANEL 120X60 ASSEMBLING ASSEMBLAGGIO GEOPANEL 120X60

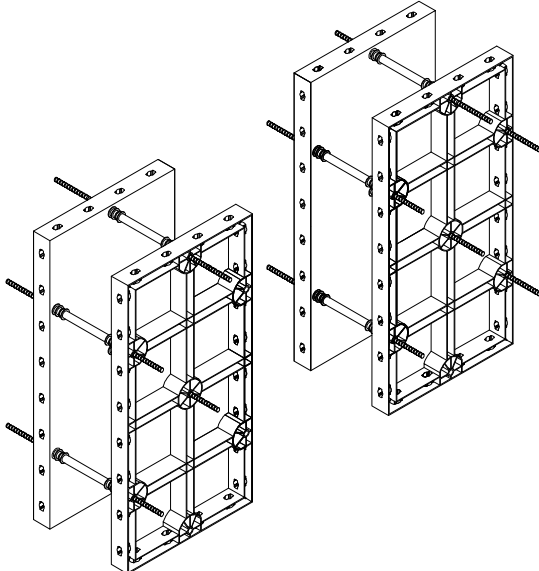


WARNING: CLOSE GEOPANEL 120X60 HOLES WITH CAPS Ø 25mm, AS SHOWN IN FIGURE
ATTENZIONE: CHIUDERE I FORI DEI GEOPANEL 120X60 CON TAPPI Ø 25mm, COME MOSTRATO IN FIGURA

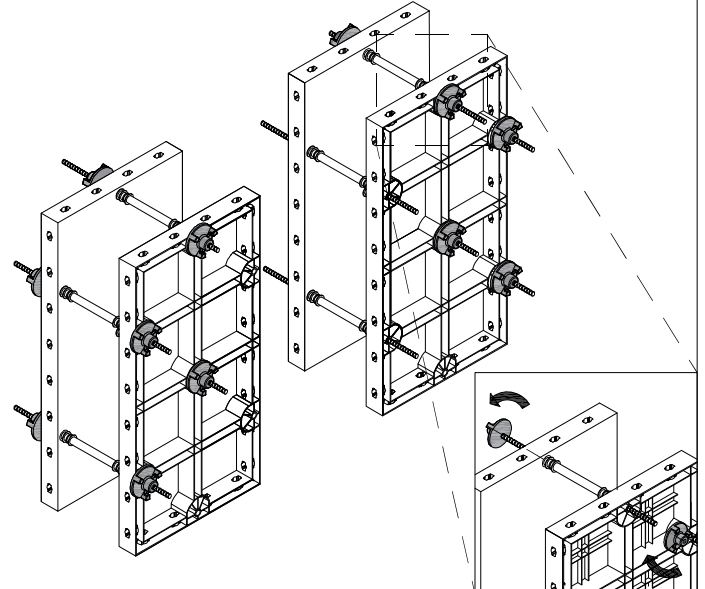
2. TIE RODS AND SPACERS INSERTION INSERIMENTO BARRE RULLATE E DISTANZIATORI



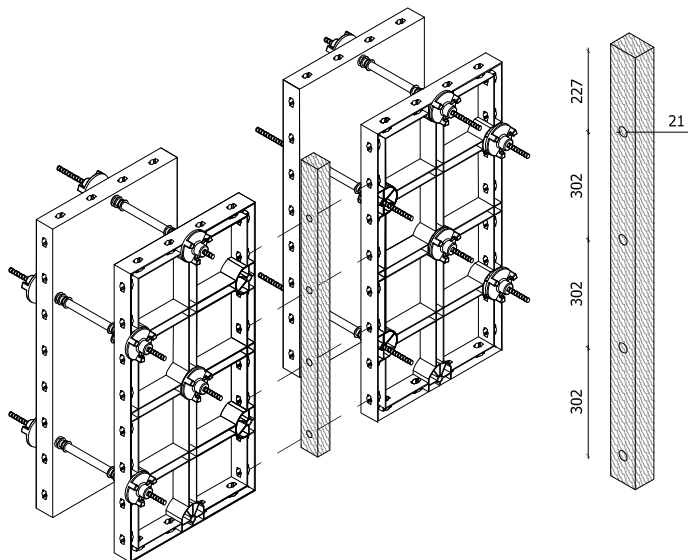
3. PANELS ASSEMBLING ASSEMBLAGGIO PANNELLI



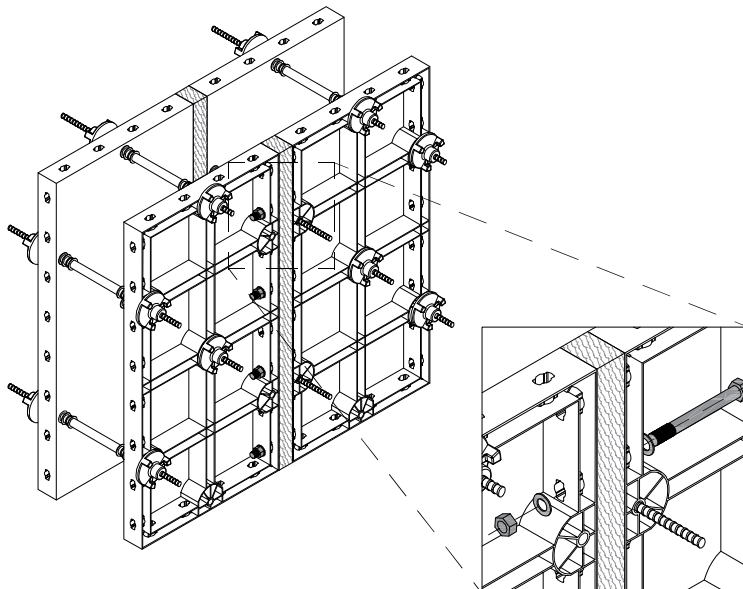
4. ANCHOR NUTS INSTALLATION INSTALLAZIONE ROSETTE



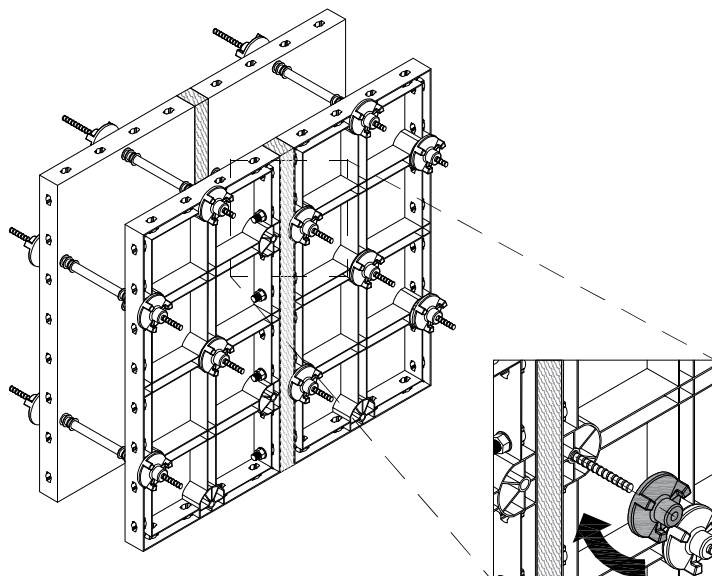
5. INSTALLATION OF WOODEN COMPENSATIONS
INSTALLAZIONE DELLE COMPENSAZIONI IN LEGNO



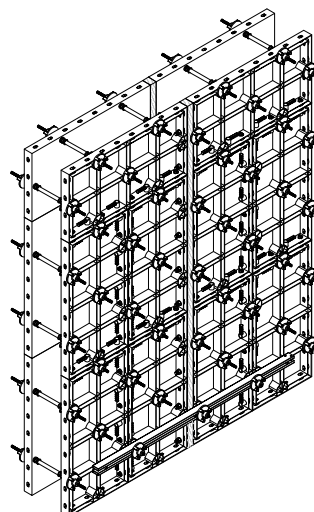
6. COMPENSATIONS FIXING WITH THREADED RODS M20
FISSAGGIO COMPENSAZIONI CON BULLONI M20



7. ANCHOR NUTS INSTALLATION
INSTALLAZIONE ROSETTE

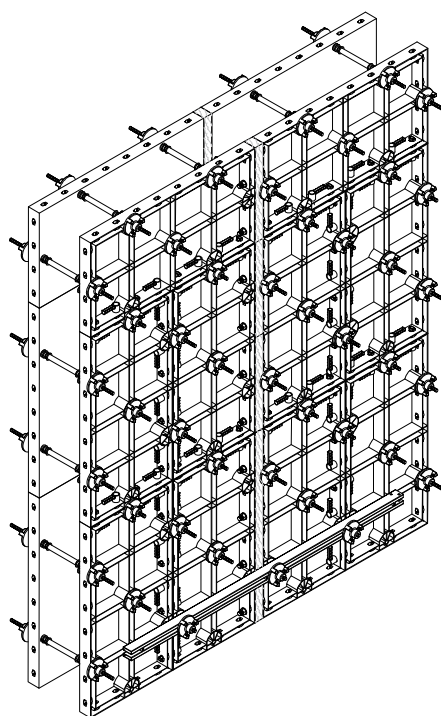


8. ALIGNMENT BARS INSTALLATION
INSTALLAZIONE BARRE ALLINEATRICI



WARNING: FOR WALL HEIGHT OVER 2.40m IS REQUIRED THE INSTALLATION OF ALIGNMENT BARS
ATTENZIONE: PER MURO CON ALTEZZA MAGGIORE 2.40m E' RICHIESTA L'INSTALLAZIONE DI BARRE ALLINEATRICI

FINAL RESULT

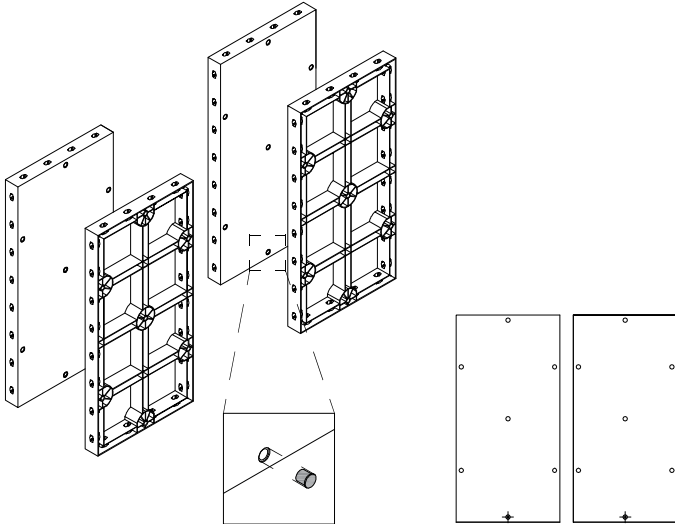


WOODEN COMPENSATIONS - COMPENSAZIONI IN LEGNO

COMPENSATIONS FOR GAPS OVER 6.5cm

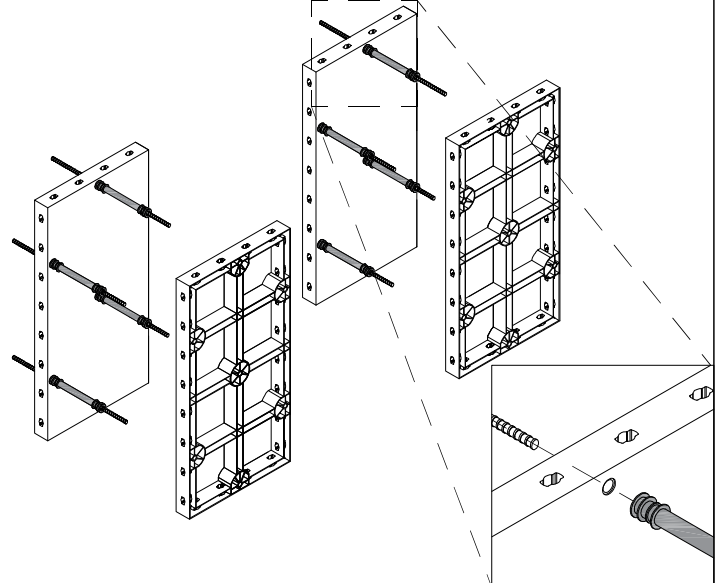
COMPENSAZIONI PER APERTURE MAGGIORI DI 6.5cm

1. GEOPANEL 120X60 ASSEMBLING ASSEMBLAGGIO GEOPANEL 120X60

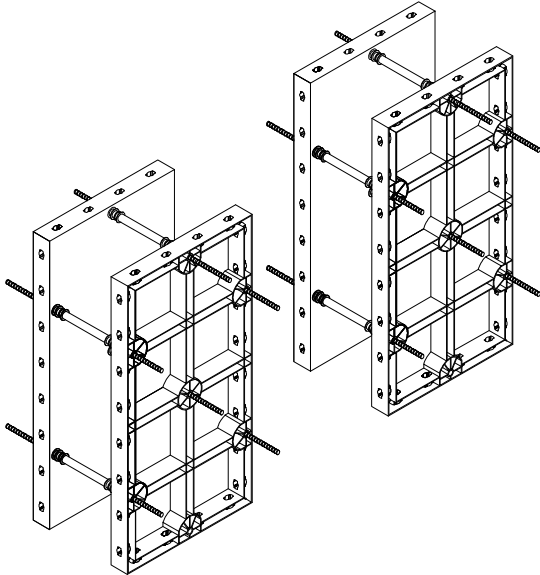


WARNING: CLOSE GEOPANEL 120X60 LOWER HOLES WITH CAPS Ø 25mm
ATTENZIONE: CHIUDERE I FORI INFERIORI DEI GEOPANEL 120X60 CON TAPPI Ø 25mm

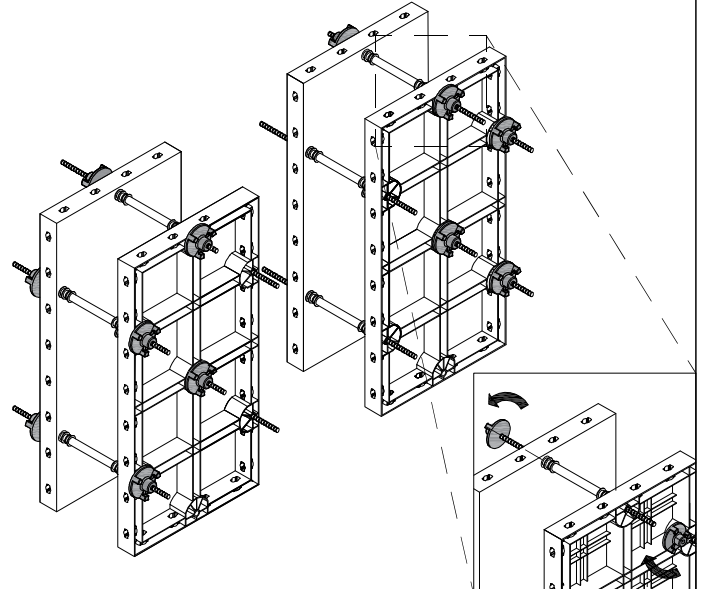
2. TIE RODS AND SPACERS INSERTION INSERIMENTO BARRE RULLATE E DISTANZIATORI



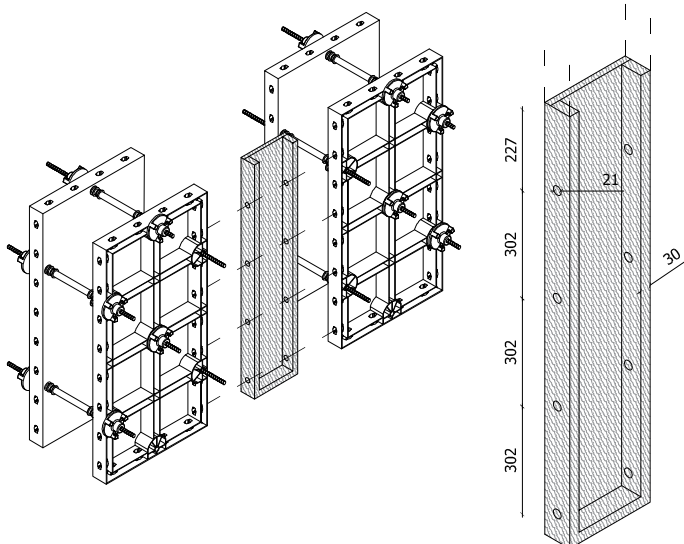
3. PANELS ASSEMBLING ASSEMBLAGGIO PANNELLI



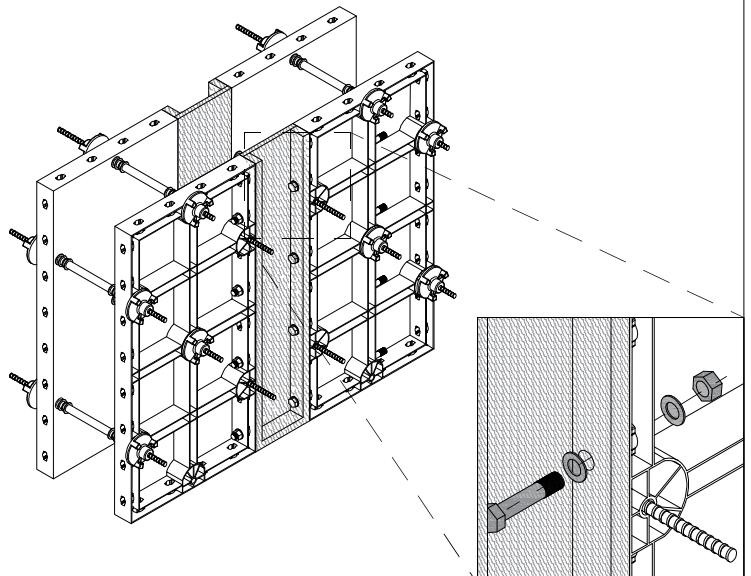
4. ANCHOR NUTS INSTALLATION INSTALLAZIONE ROSETTE



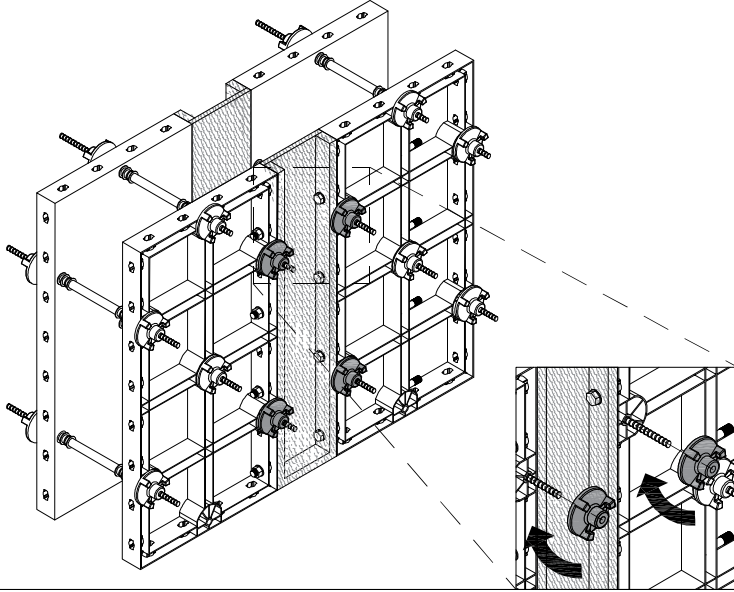
5. INSTALLATION OF WOODEN COMPENSATIONS INSTALLAZIONE DELLE COMPENSAZIONI IN LEGNO



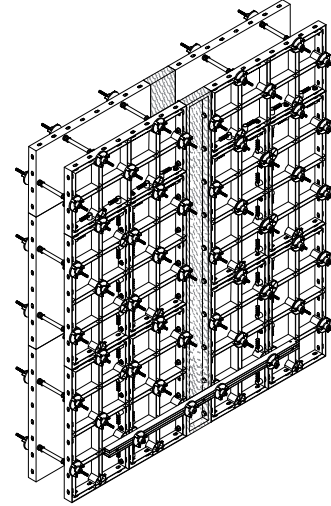
6. COMPENSATIONS FIXING WITH THREADED RODS M20 FISSAGGIO COMPENSAZIONI CON BULLONI M20



7. ANCHOR NUTS INSTALLATION
INSTALLAZIONE ROSETTE

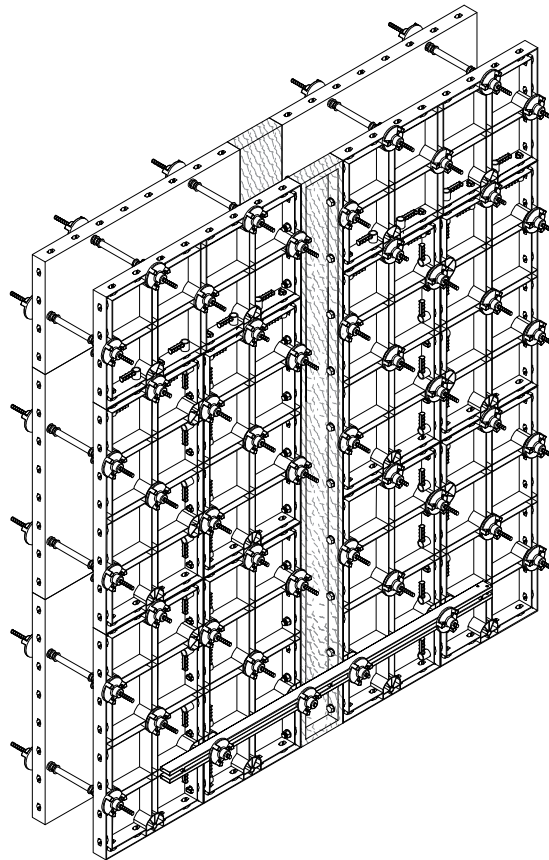


8. ALIGNMENT BARS INSTALLATION
INSTALLAZIONE BARRE ALLINEATRICI



WARNING: FOR WALL HEIGHT OVER 2.40m IS REQUIRED THE INSTALLATION OF ALIGNMENT BARS
ATTENZIONE: PER MURO CON ALTEZZA MAGGIORE 2.40m E' RICHIESTA L'INSTALLAZIONE DI BARRE ALLINEATRICI

FINAL RESULT



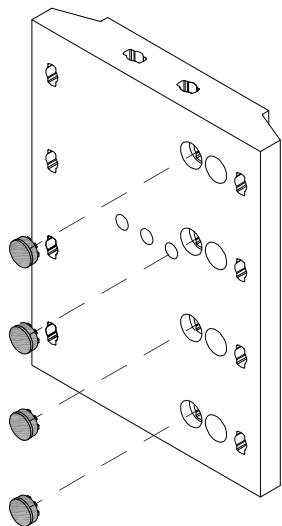
GEOPANEL CL 20 - 25 - 30

WALL THICKNESS	20 cm	25 cm	30 cm
HANDLE CAPS REMOVING			

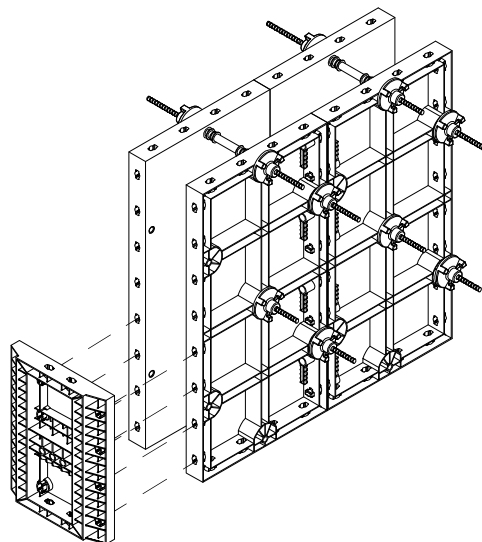
GEOPANEL CL 35 - 40 - 45

WALL THICKNESS	35 cm	40 cm	45 cm
HANDLE CAPS REMOVING			

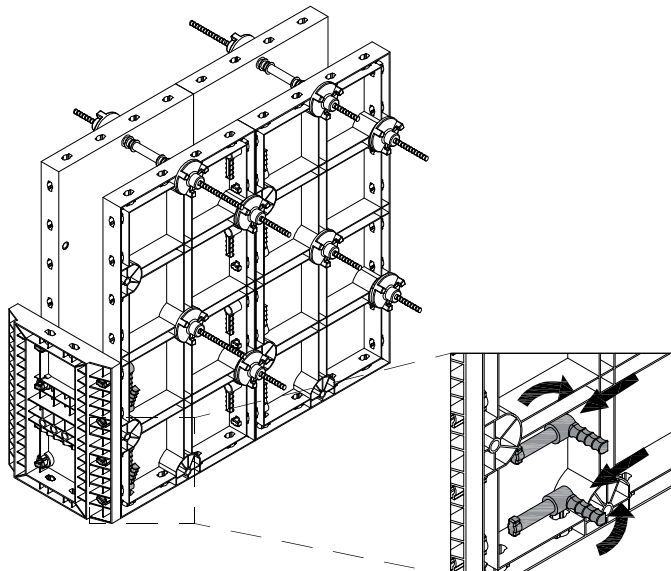
1. GEOPANEL CL HANDLE CAPS ROMOVING
RIMOZIONE TAPPI MANIGLIE DEL GEOPANEL CL



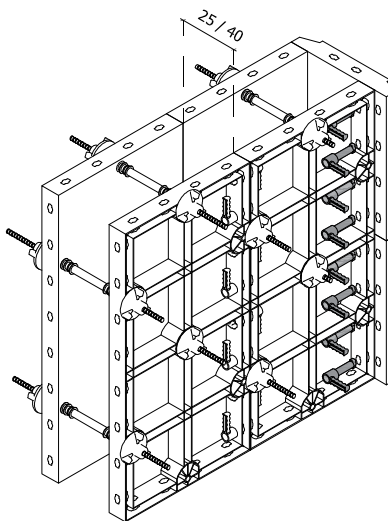
2. GEOPANEL CL ASSEMBLING
ASSEMBLAGGIO GEOPANEL CL



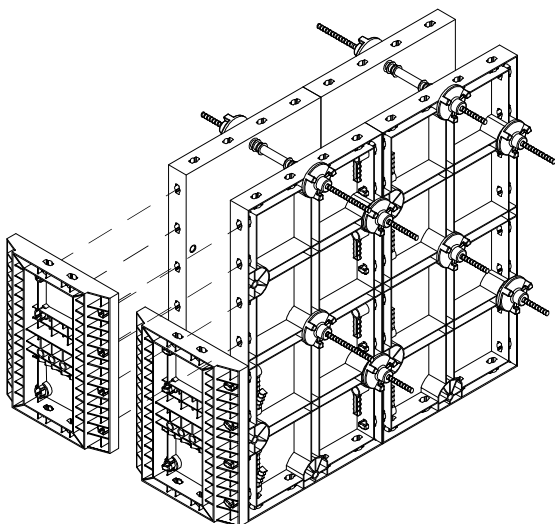
3. GEOPANEL CL FIXING WITH HANDLES
FISSAGGIO GEOPANEL CL CON MANIGLIE



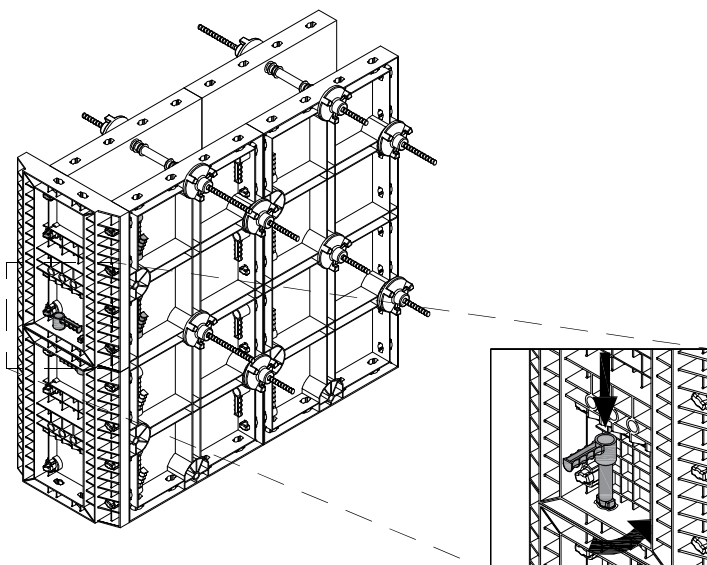
WARNING: HANDLES INSERCTION FOR 25cm AND 40cm WALL THICKNESS IT'S APPLICABLE ONLY FROM THE BACK
ATTENZIONE: L'INSERZIONE DELLE MANIGLIE PER SPESSORI DEL MURO DI 25cm E 40cm E' POSSIBILE SOLO DAL RETRO



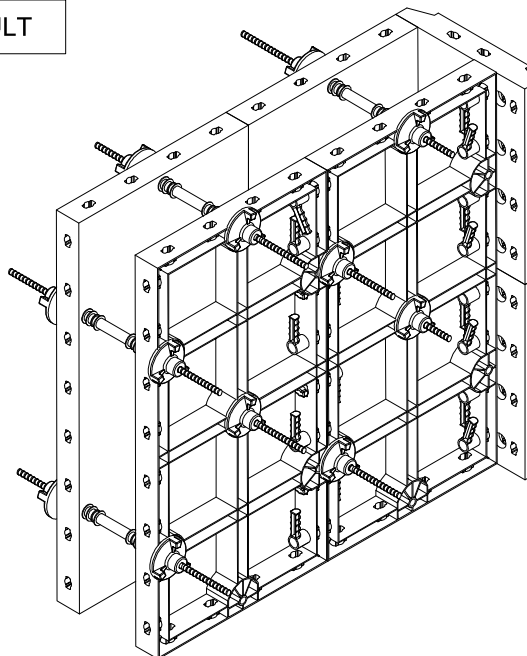
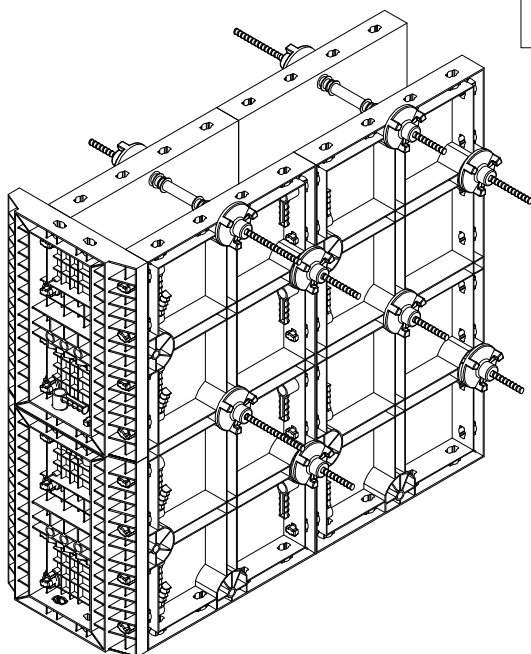
4. SECOND LEVEL OF GEOPANEL CL INSTALLATION
INSTALLAZIONE DEL SECONDO LIVELLO DI GEOPANEL CL



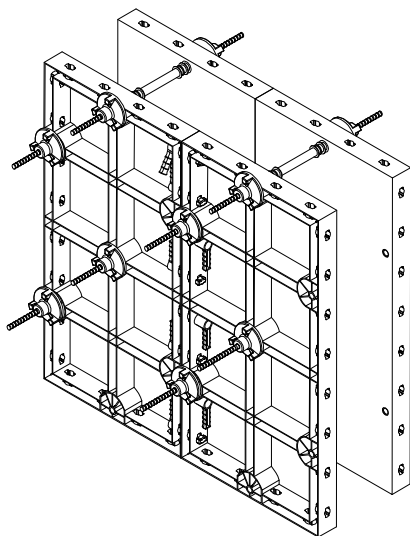
5. GEOPANEL CL FIXING WITH HANDLES
FISSAGGIO GEOPANEL CL CON MANIGLIE



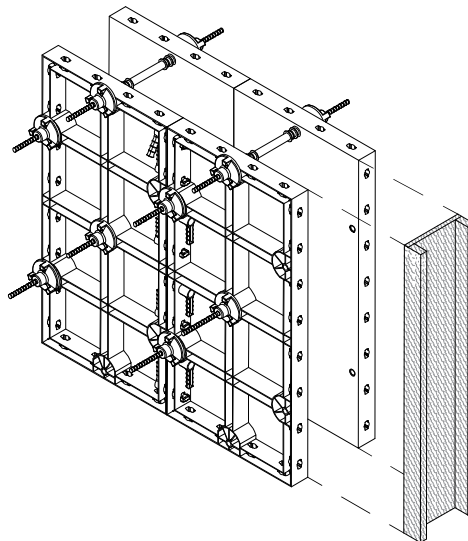
FINAL RESULT



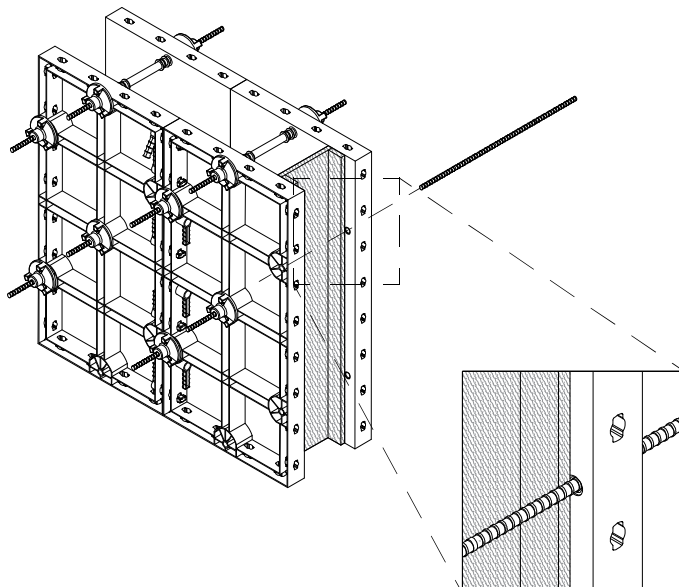
1. WALL INSTALLATION
INSTALLAZIONE MURO



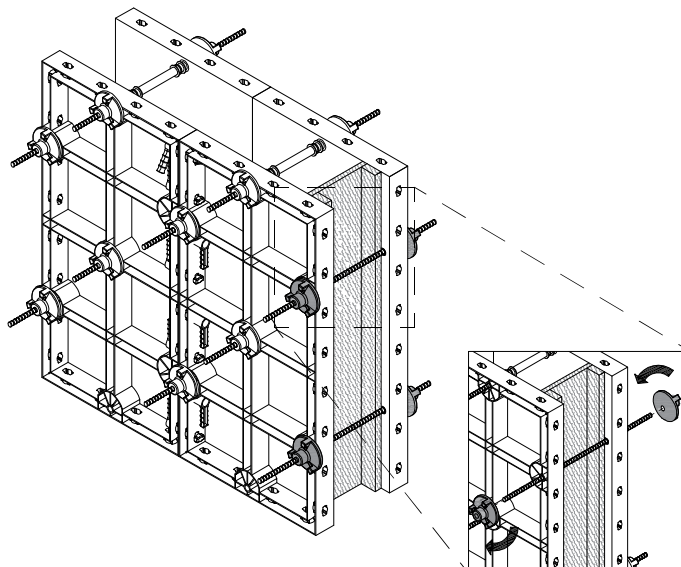
2. CLOSING WOODEN COMPENSATION ASSEMBLING
ASSEMBLAGGIO COMPENSAZIONE DI CHIUSURA IN LEGNO



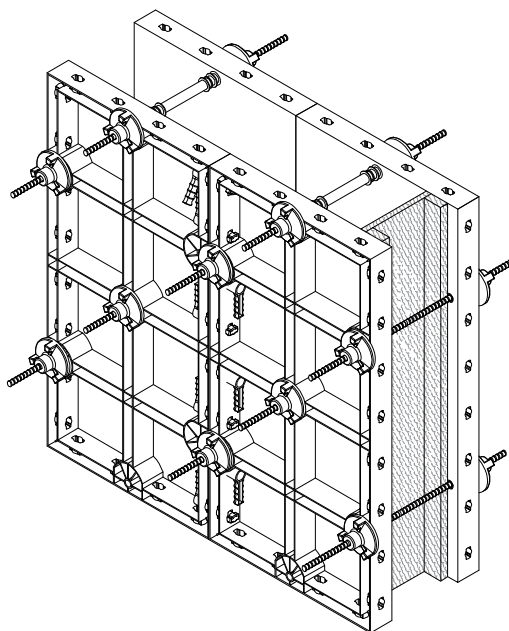
3. TIE RODS INSERTION
INSERIMENTO BARRE RULLATE



4. ANCHOR NUTS INSTALLATION
INSTALLAZIONE ROSETTE



FINAL RESULT

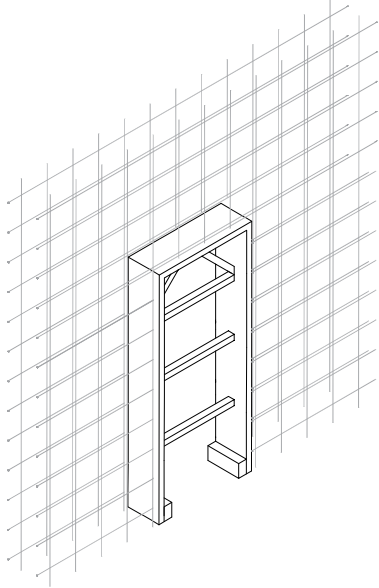


SPECIAL APPLICATIONS

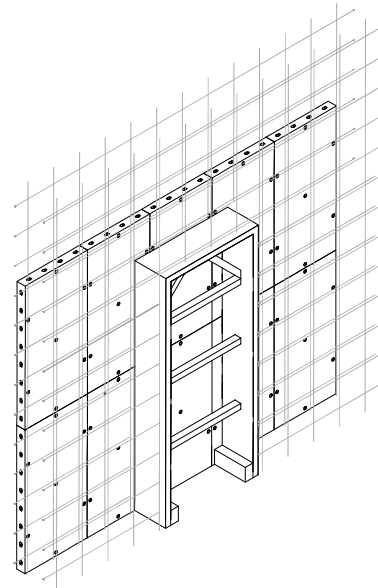
APPLICAZIONI SPECIALI

- ✓ **LIGHT**
- ✓ **PRACTICAL**
- ✓ **REUSABLE**

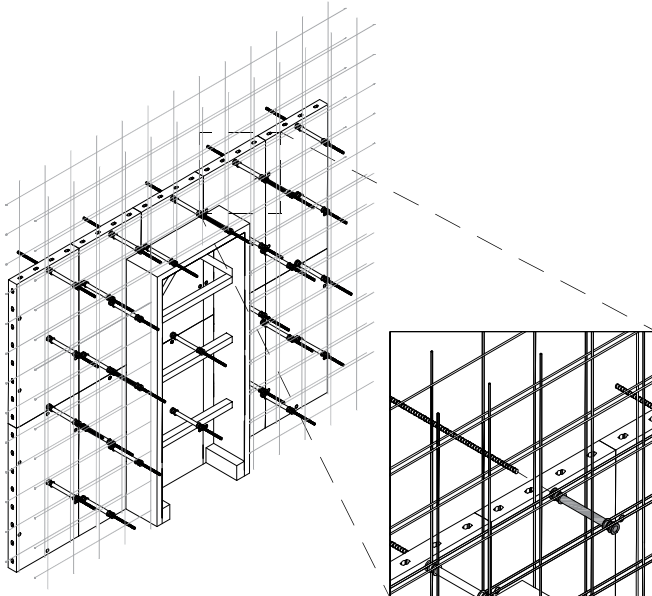
1. DOOR FORMWORK INSTALLATION
INSTALLAZIONE CASSEFORMA PER PORTA



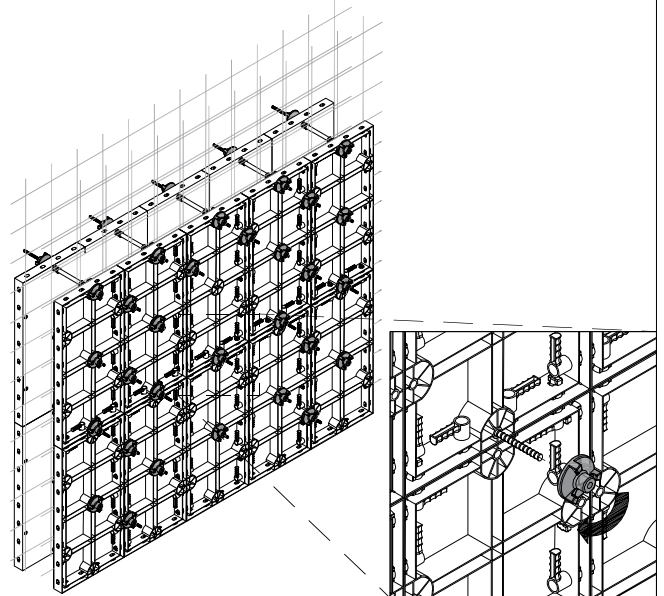
2. FIRST WALL SIDE ASSEMBLING
ASSEMBLAGGIO DEL PRIMO LATO DEL MURO



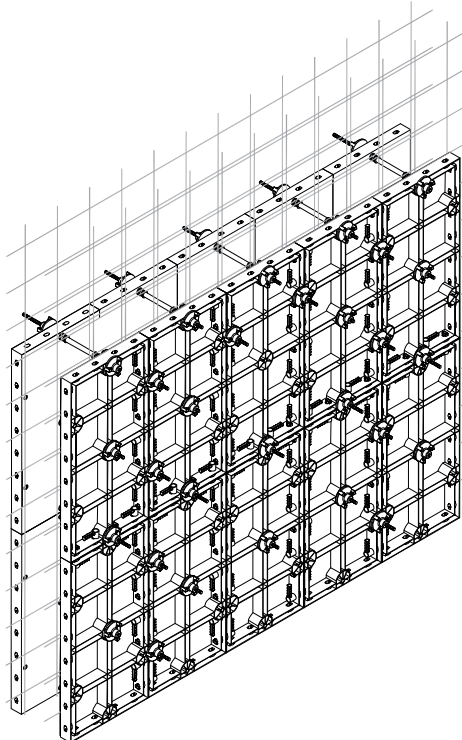
3. TIE RODS AND SPACERS INSTALLATION
INSTALLAZIONE BARRE RULLATE E DISTANZIATORI



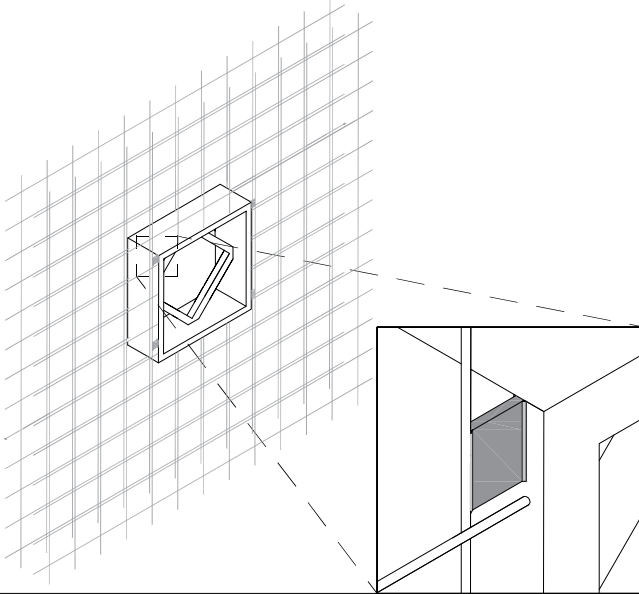
4. SECOND WALL SIDE ASSEMBLING
ASSEMBLAGGIO SECONDO LATO DEL MURO



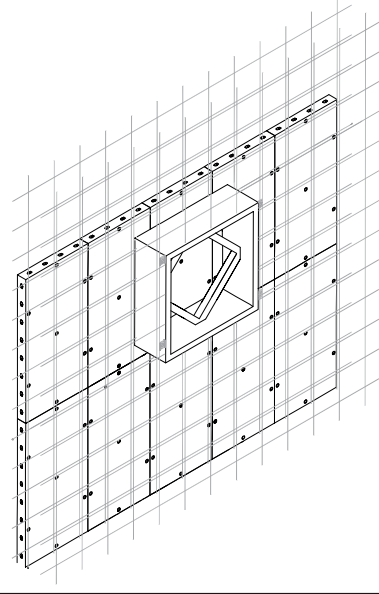
FINAL RESULT



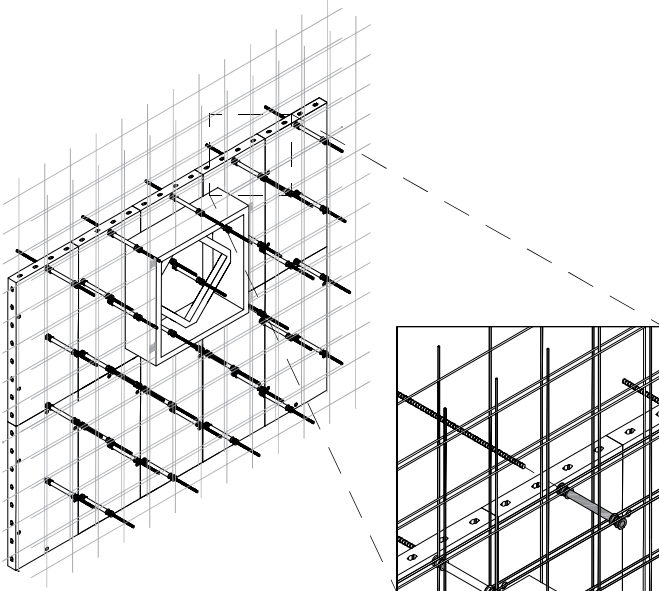
1. WINDOW FORMWORK INSTALLATION (WELDED CONNECTIONS)
INSTALLAZIONE CASSEFORMA FINESTRA (COLLEGAMENTI SALDATI)



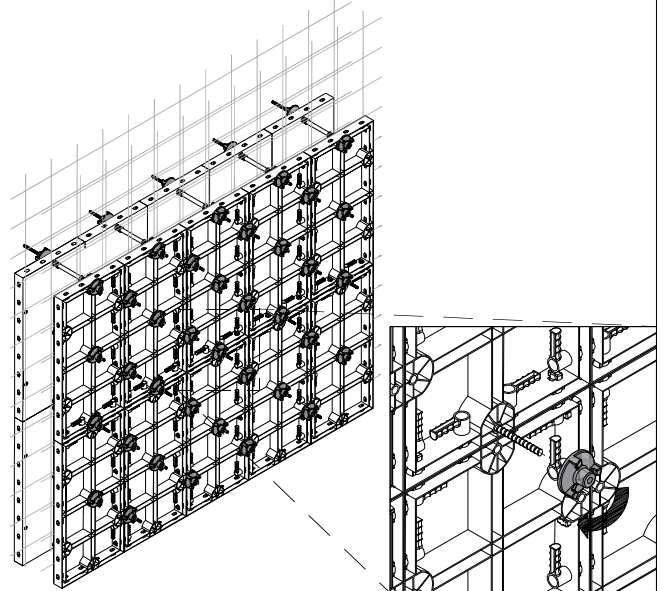
2. FIRST WALL SIDE ASSEMBLING
ASSEMBLAGGIO DEL PRIMO LATO DEL MURO



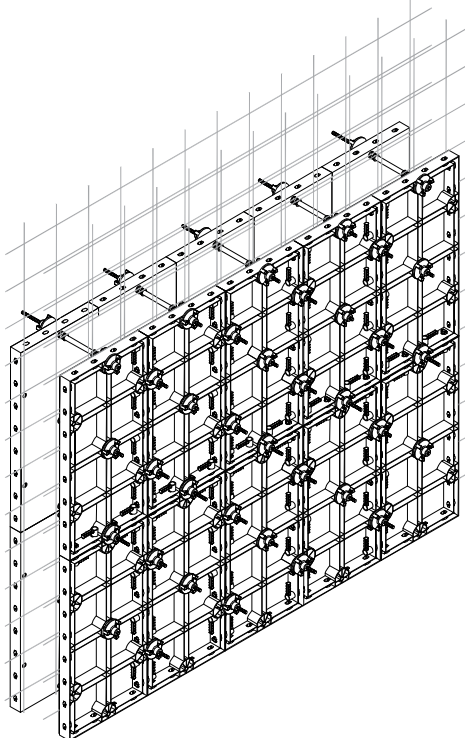
3. TIE RODS AND SPACERS INSTALLATION
INSTALLAZIONE BARRE RULLATE E DISTANZIATORI



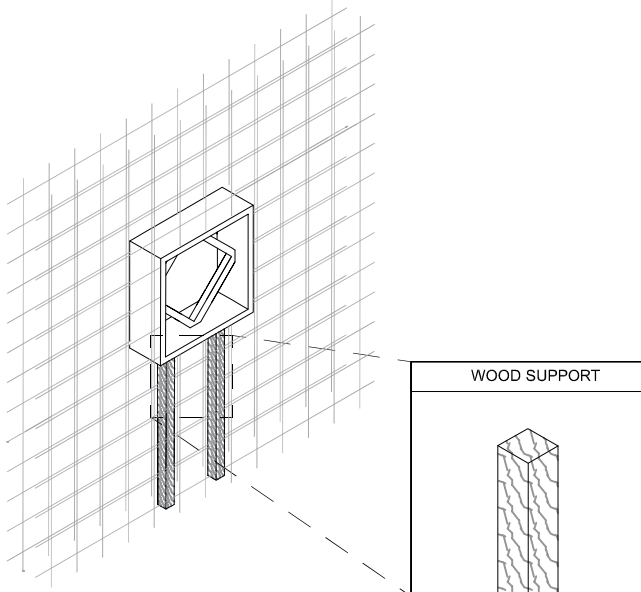
4. SECOND WALL SIDE ASSEMBLING
ASSEMBLAGGIO SECONDO LATO DEL MURO



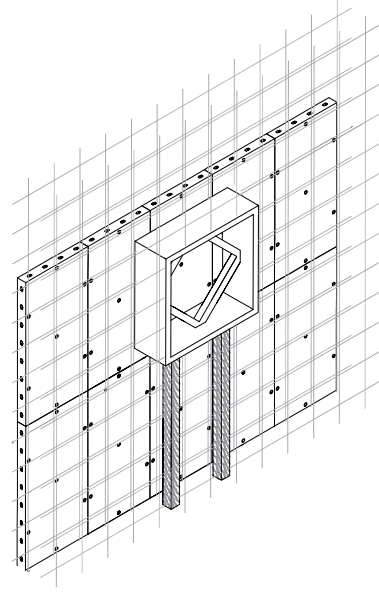
FINAL RESULT



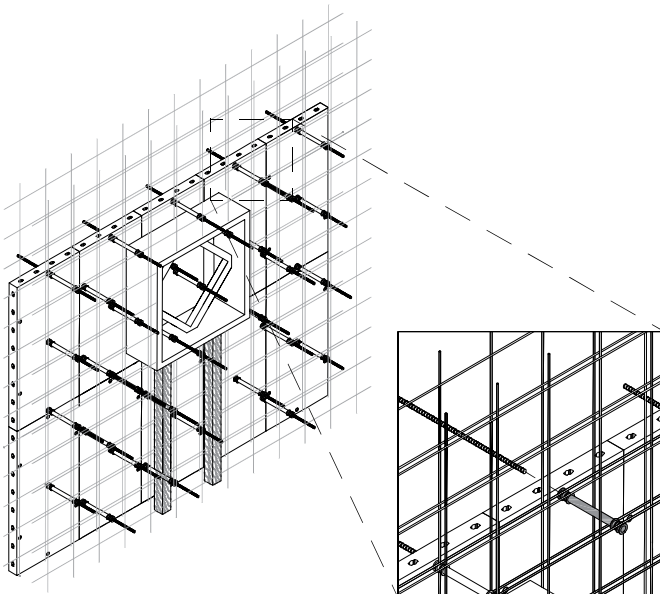
1. WINDOW FORMWORK INSTALLATION (WOOD SUPPORTS)
 INSTALLAZIONE CASSEFORMA FINESTRA (SUPPORTI IN LEGNO)



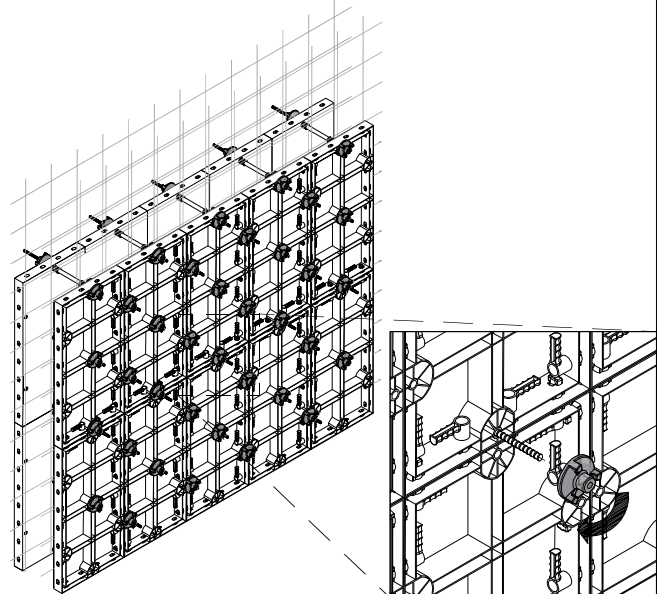
2. FIRST WALL SIDE ASSEMBLING
 ASSEMBLAGGIO DEL PRIMO LATO DEL MURO



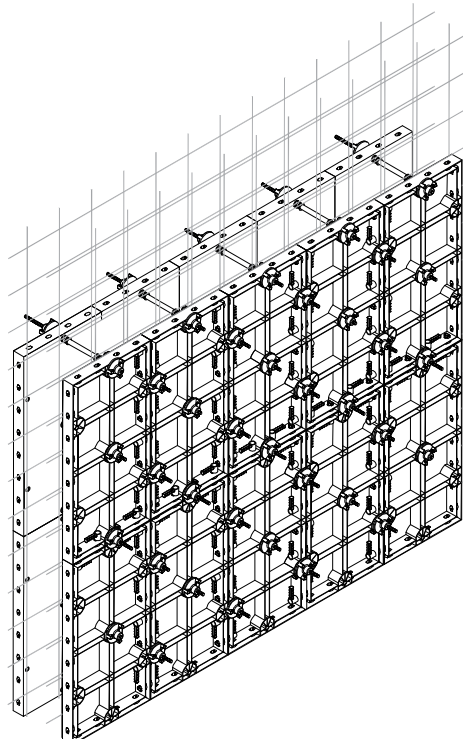
3. TIE RODS AND SPACERS INSTALLATION
 INSTALLAZIONE BARRE RULLATE E DISTANZIATORI



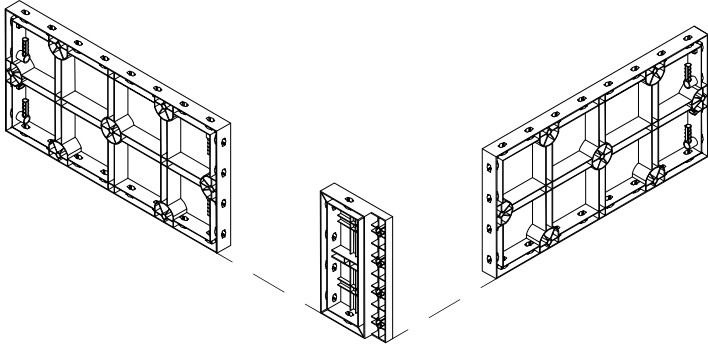
4. SECOND WALL SIDE ASSEMBLING
 ASSEMBLAGGIO SECONDO LATO DEL MURO



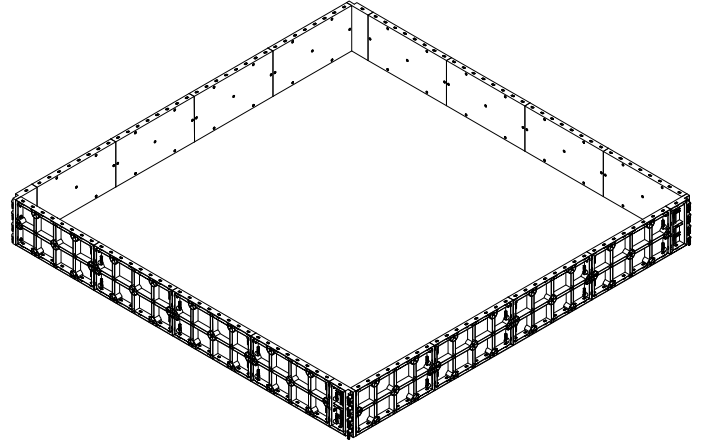
FINAL RESULT



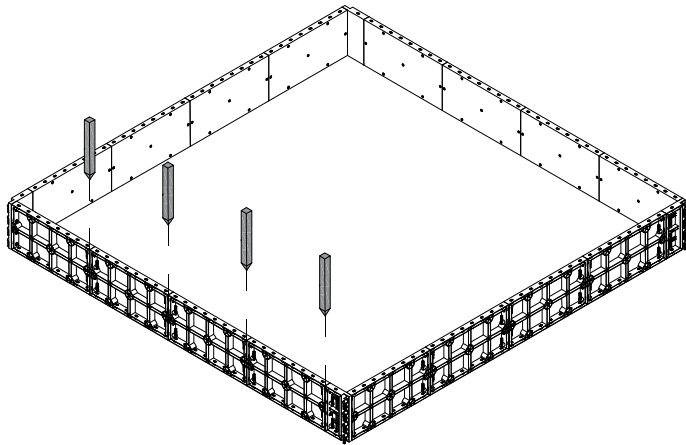
1. EXTERNAL CORNERINSTALLATION
INSTALLAZIONE ANGOLO ESTERNO



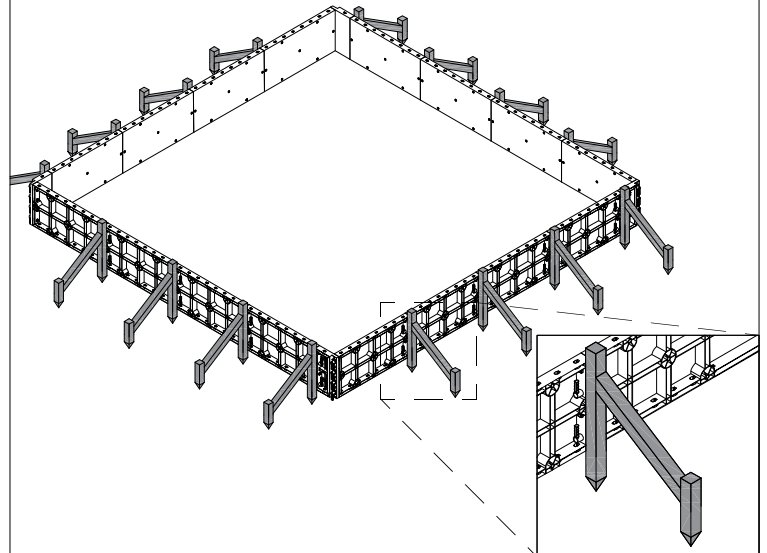
2. GEOPANEL ASSEMBLING
ASSEMBLAGGIO GEOPANEL



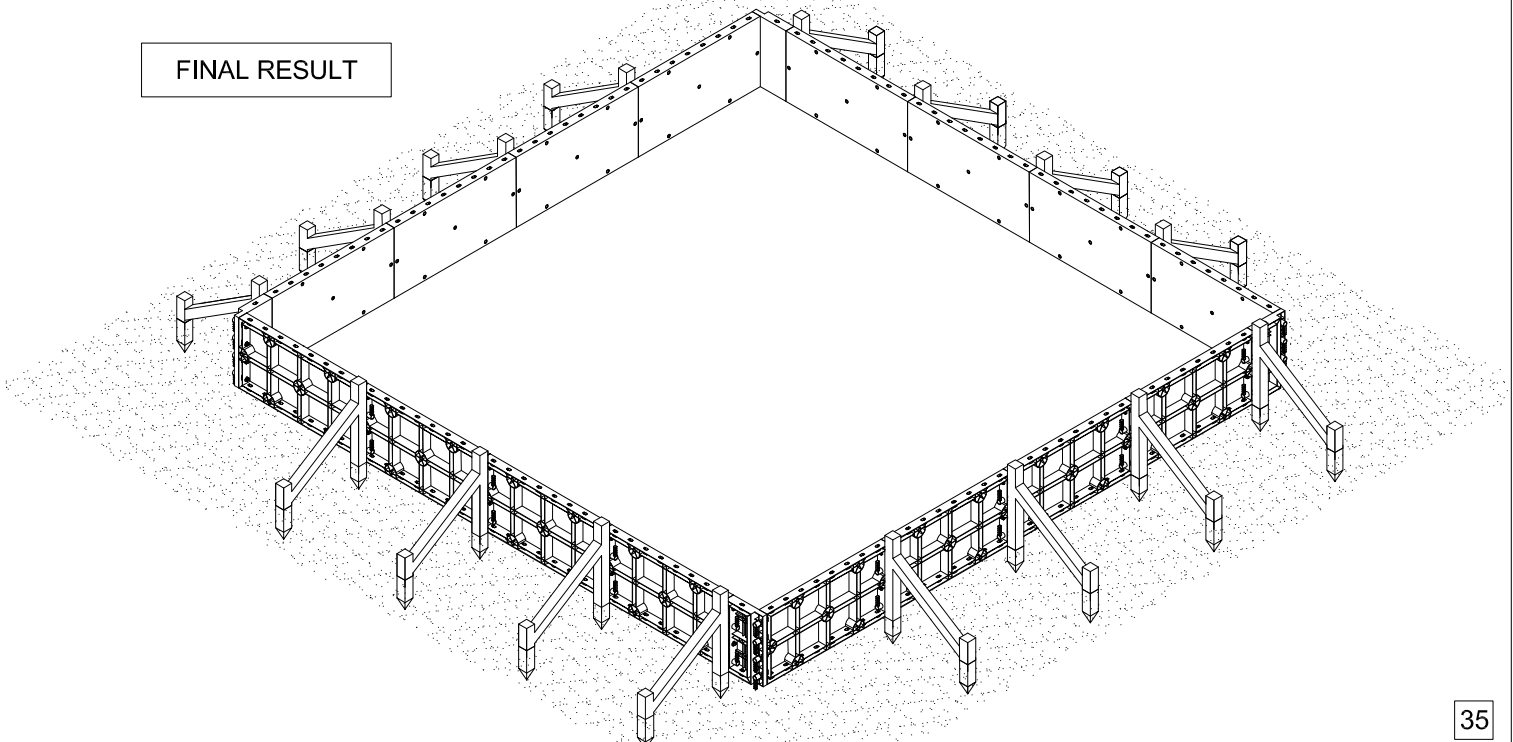
3. PICKETS INSTALLATION
INSTALLAZIONE PICCHETTI



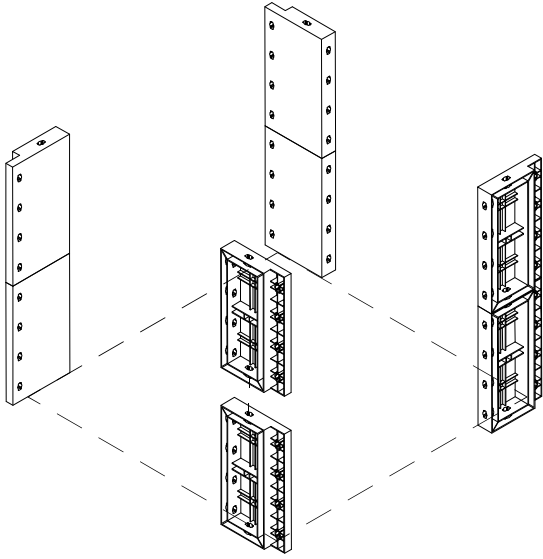
4. PICKETS SUPPORTS INSTALLATION
INSTALLAZIONE SUPPORTI PER PICCHETTI



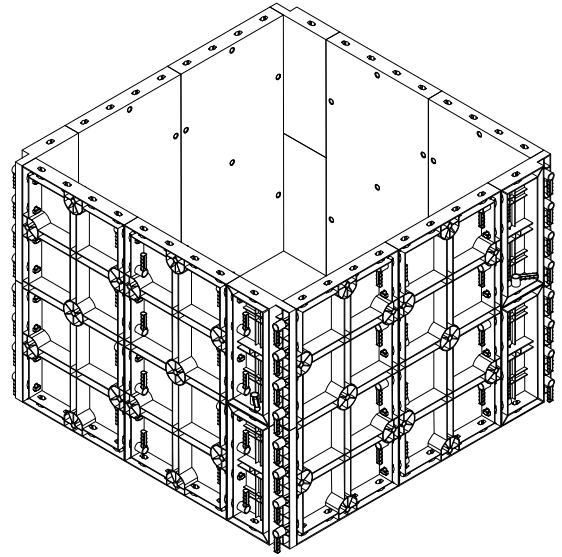
FINAL RESULT



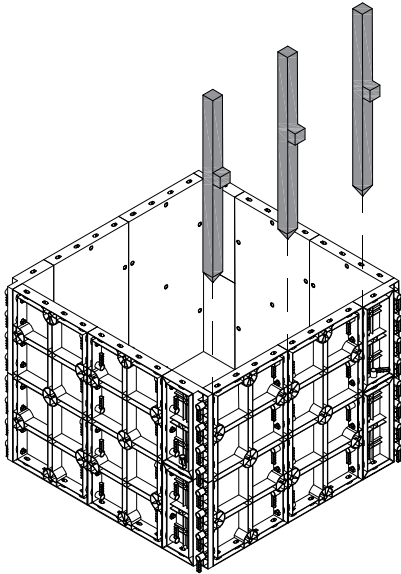
1. EXTERNAL CORNERS INSTALLATION
INSTALLAZIONE ANGOLI ESTERNI



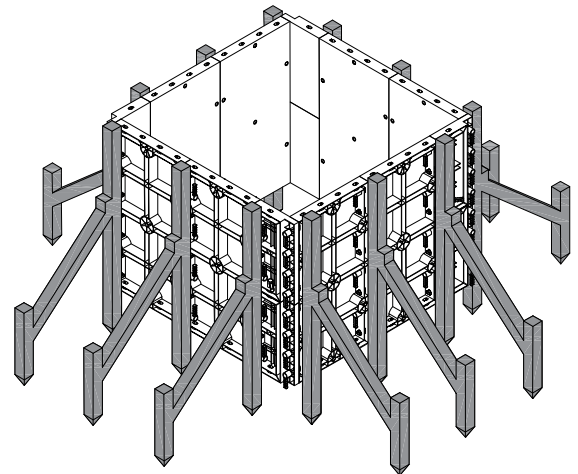
2. GEOPANEL ASSEMBLING
ASSEMBLAGGIO GEOPANEL



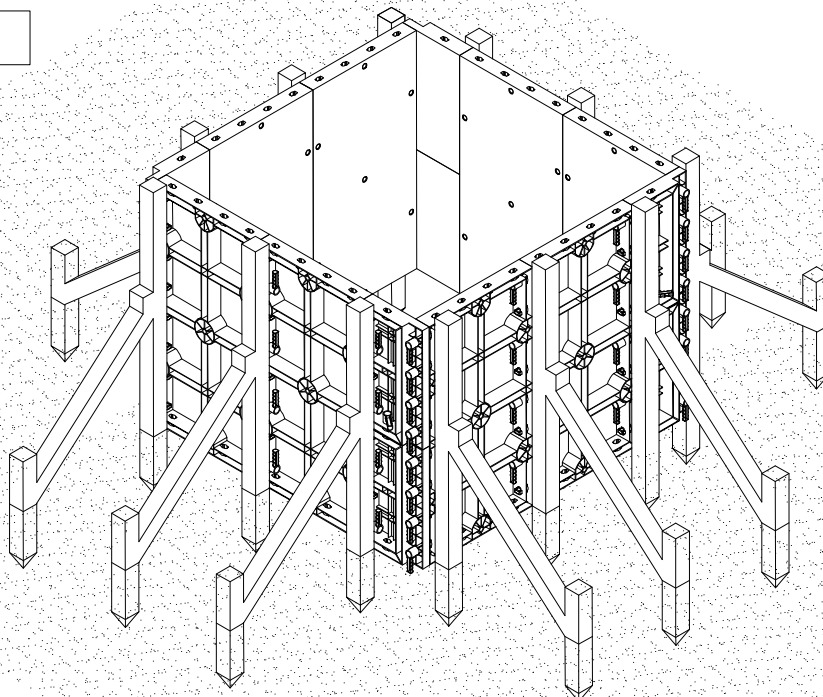
3. PICKETS INSTALLATION
INSTALLAZIONE PICCHETTI



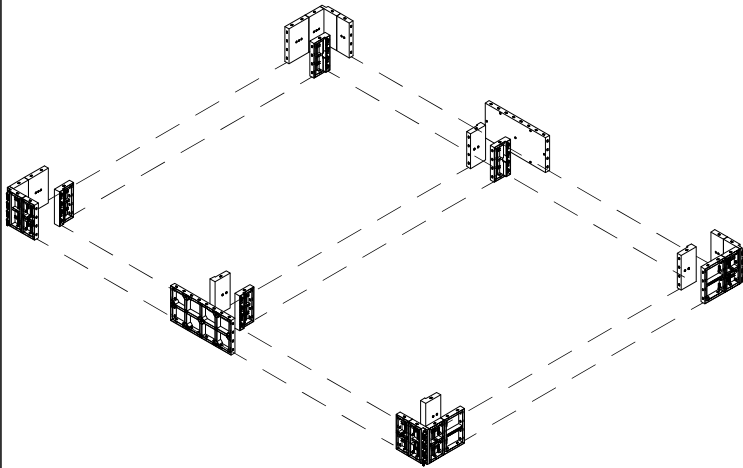
4. PICKETS SUPPORTS INSTALLATION
INSTALLAZIONE SUPPORTI PER PICCHETTI



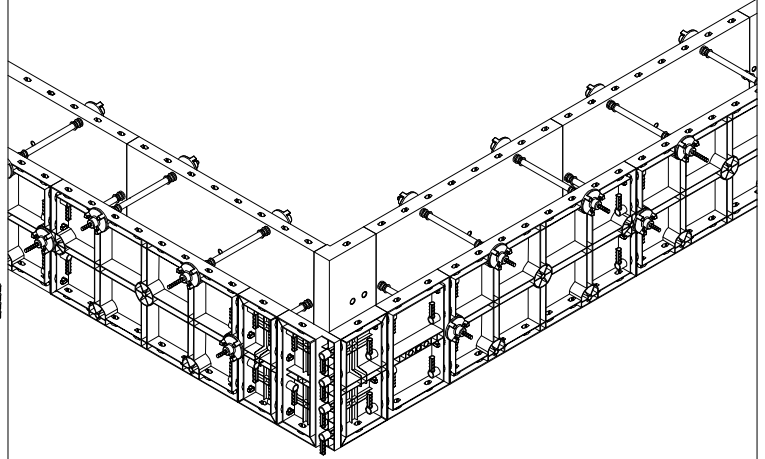
FINAL RESULT



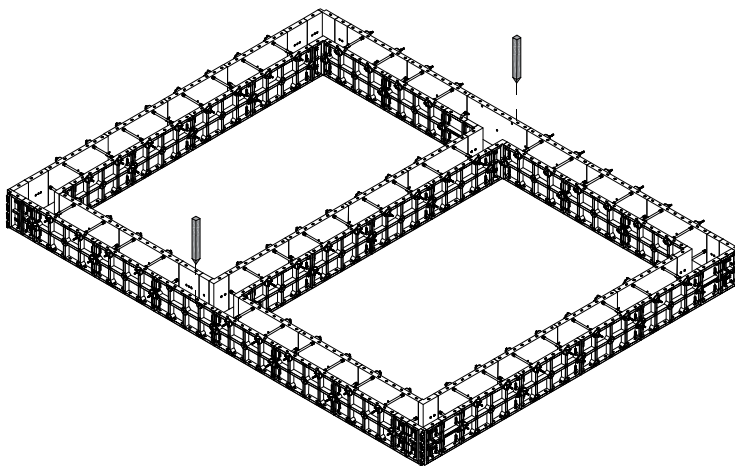
1. CORNERS ASSEMBLING
ASSEMBLAGGIO ANGOLI



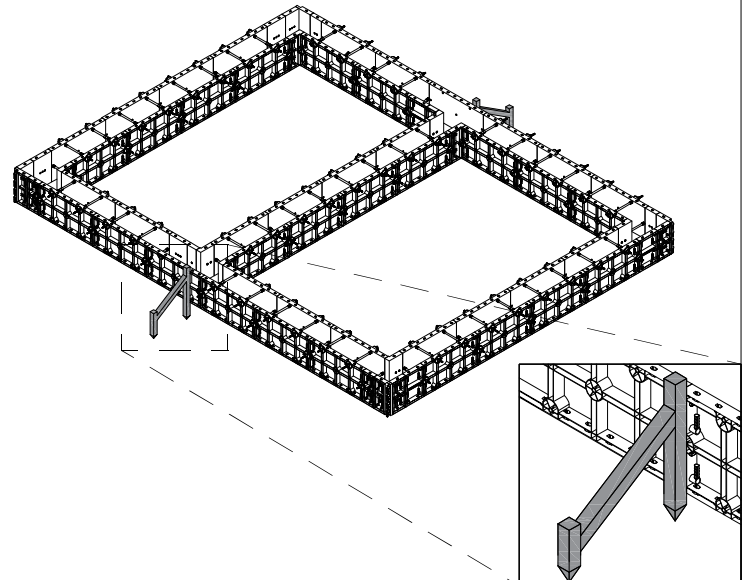
2. WALL ASSEMBLING
ASSEMBLAGGIO MURI



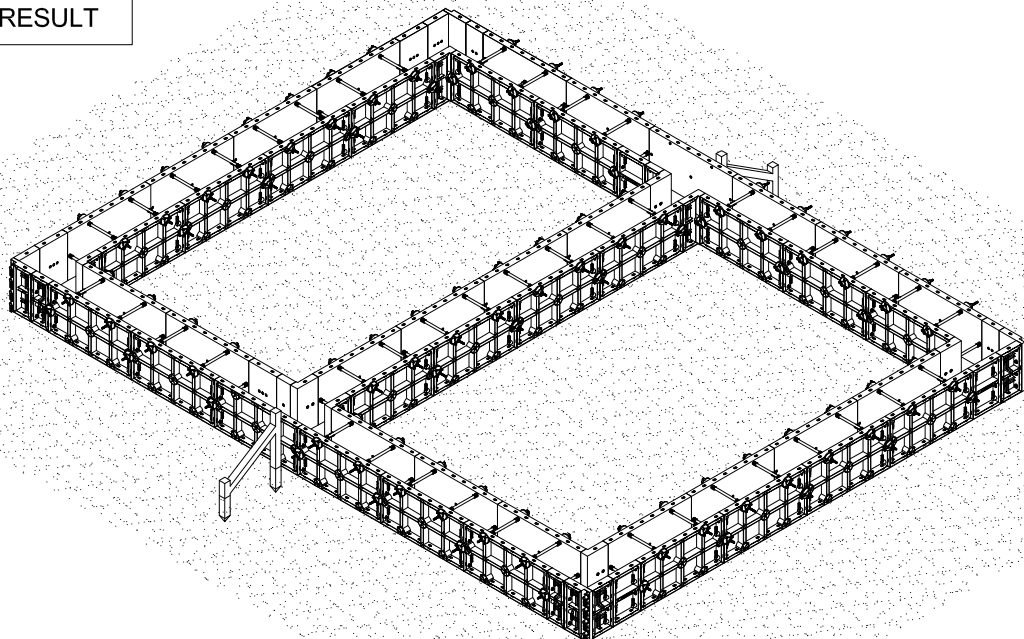
3. PICKETS INSTALLATION
INSTALLAZIONE PICCHETTI



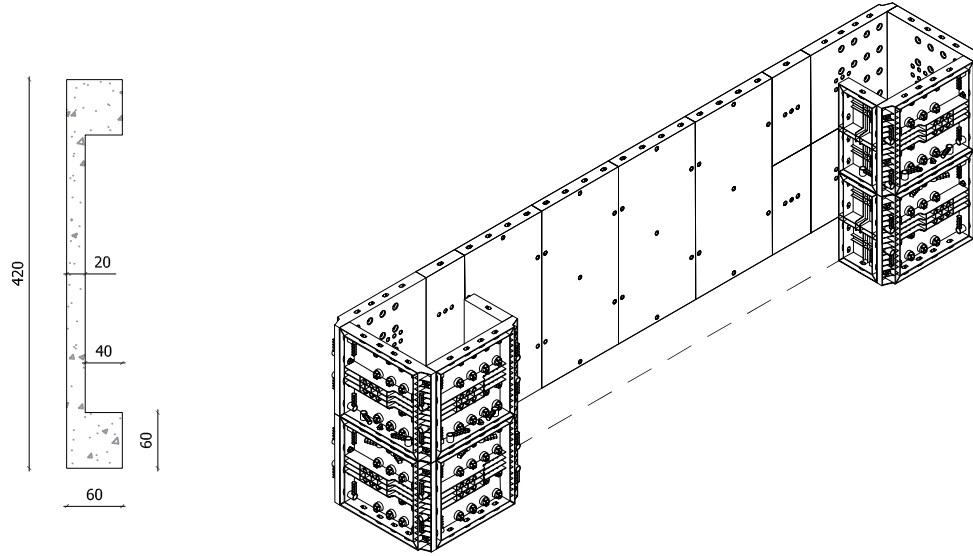
4. PICKETS SUPPORTS INSTALLATION
INSTALLAZIONE SUPPORTI PER PICCHETTI



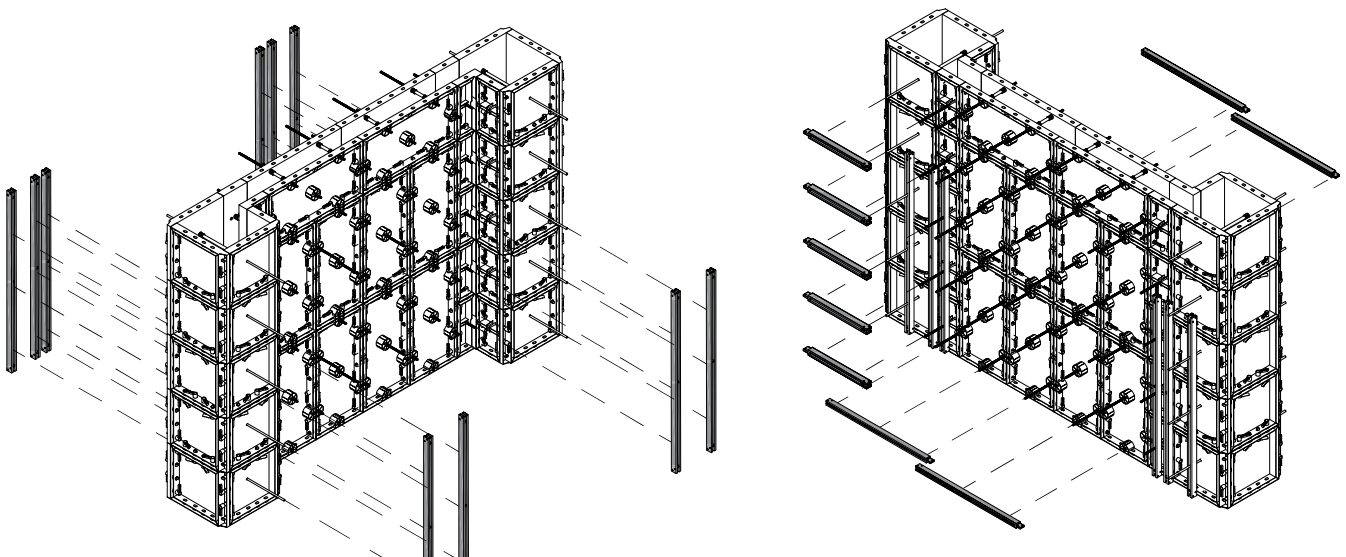
FINAL RESULT



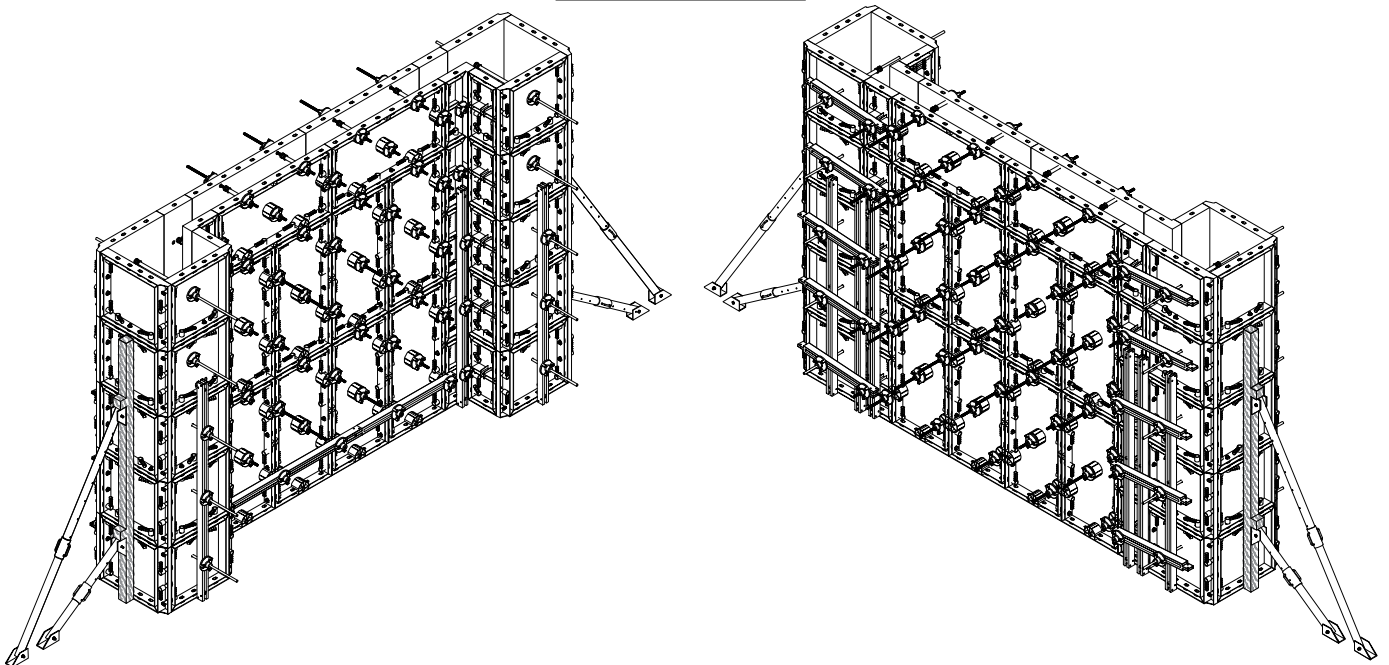
1. COLUMNS WITH GEOPANEL STAR AND WALL ASSEMBLING
 ASSEMBLAGGIO COLONNE CON GEOPANEL STAR E MURO



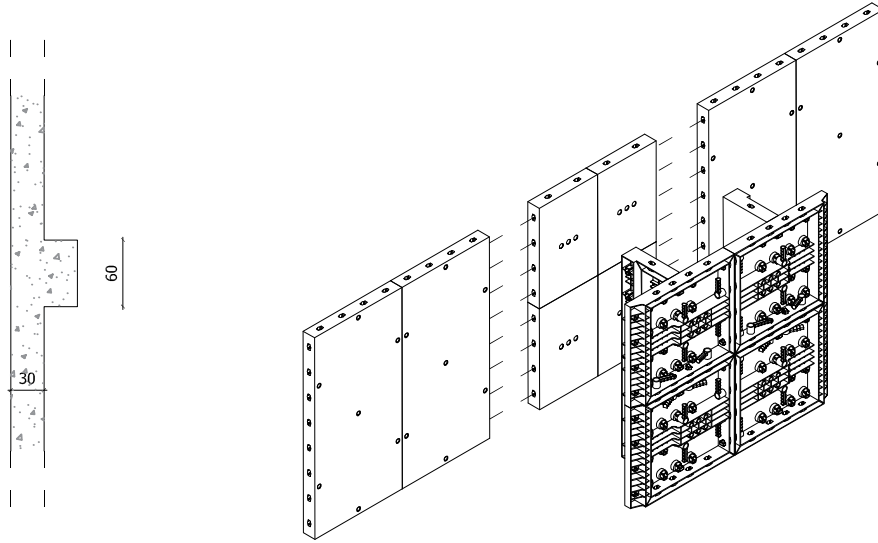
2. ALIGNMENT BARS INSTALLATION
 INSTALLAZIONE BARRE ALLINEATRICI



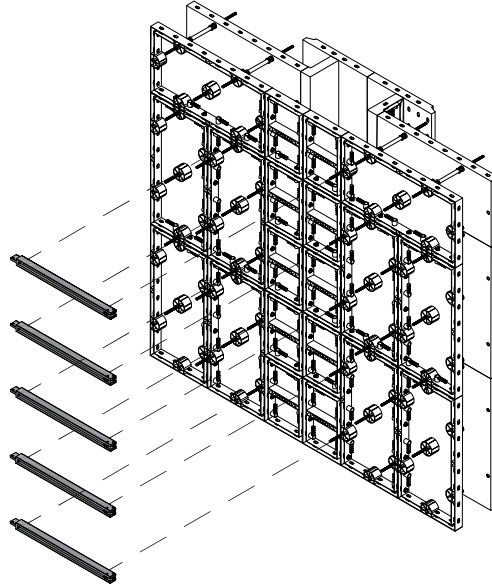
FINAL RESULT



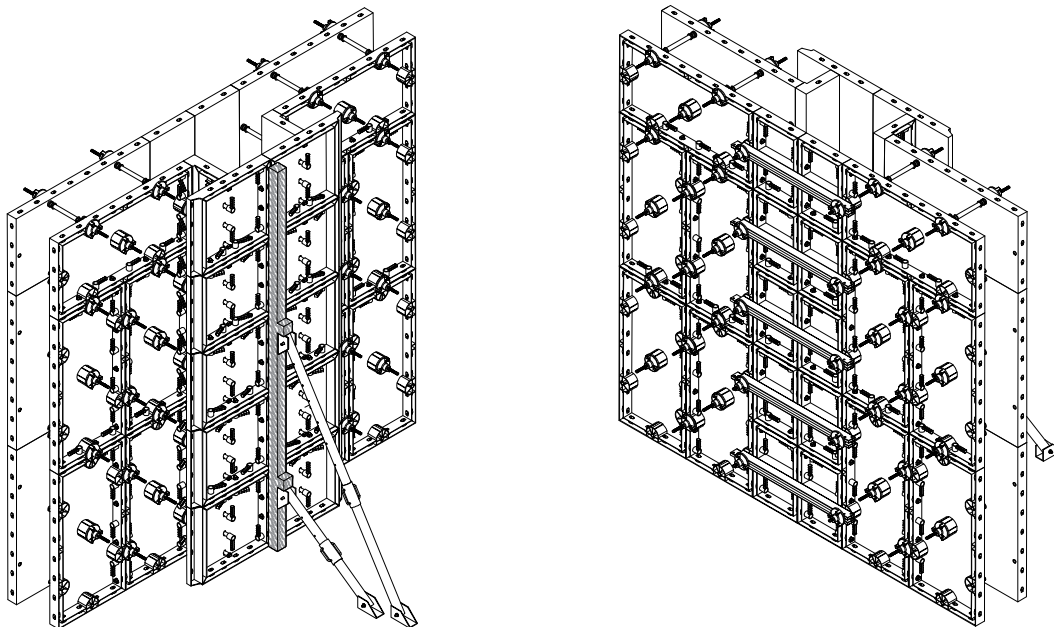
1. COLUMN WITH GEOPANEL STAR AND WALL ASSEMBLING
 ASSEMBLAGGIO COLONNA CON GEOPANEL STAR E MURO

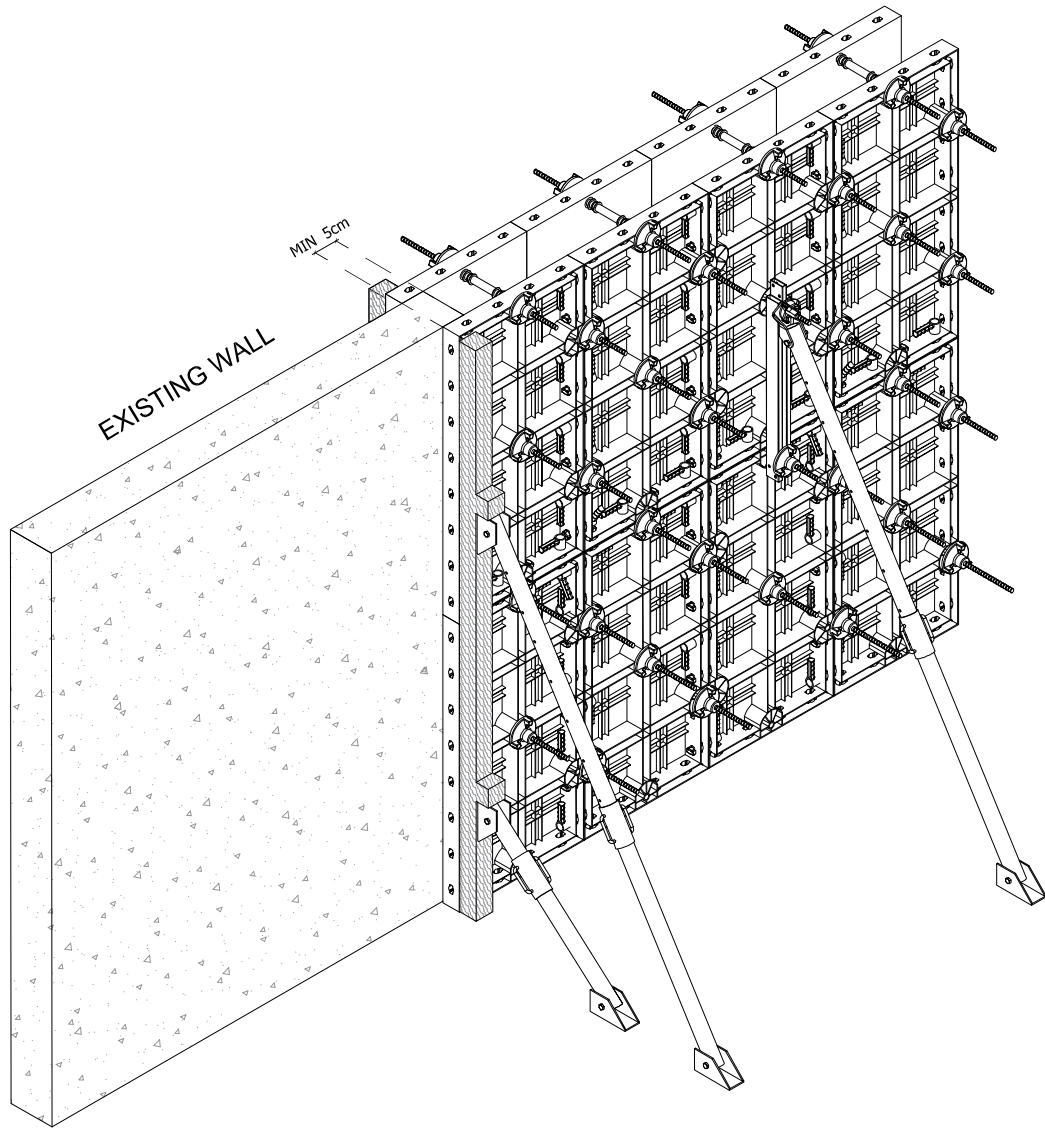


2. ALIGNMENT BARS INSTALLATION
 INSTALLAZIONE BARRE ALLINEATRICI

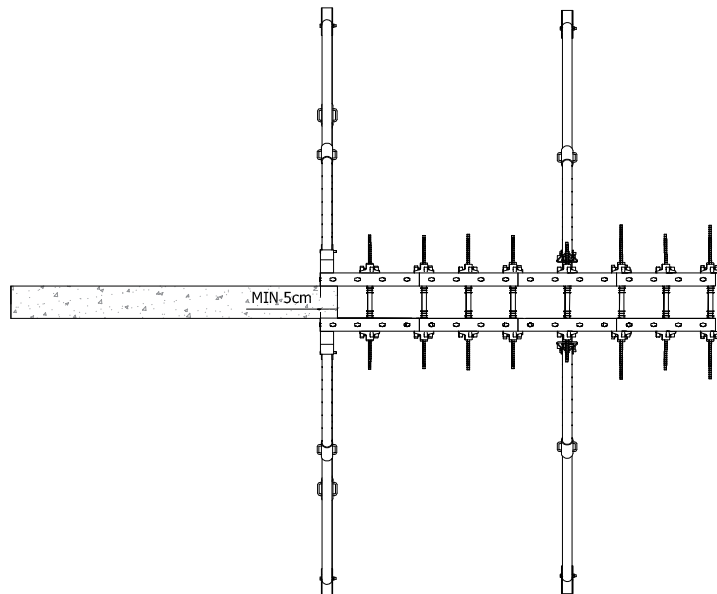


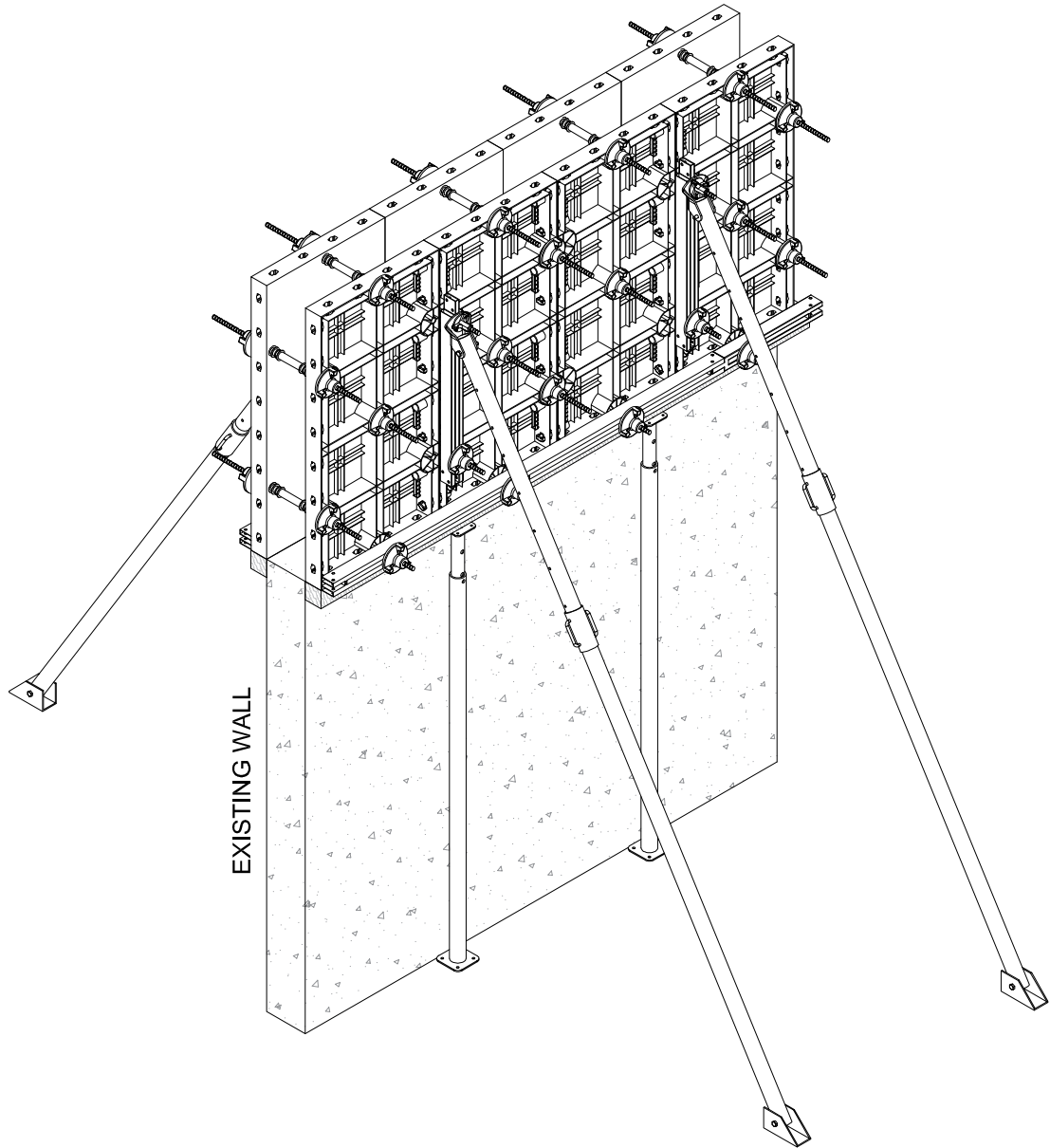
FINAL RESULT



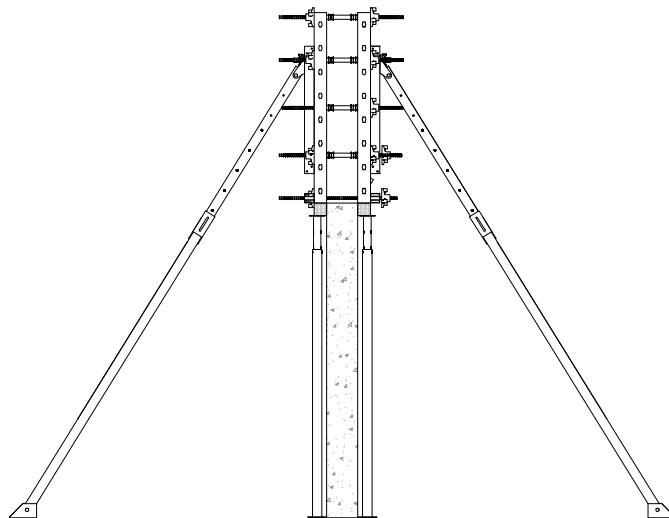


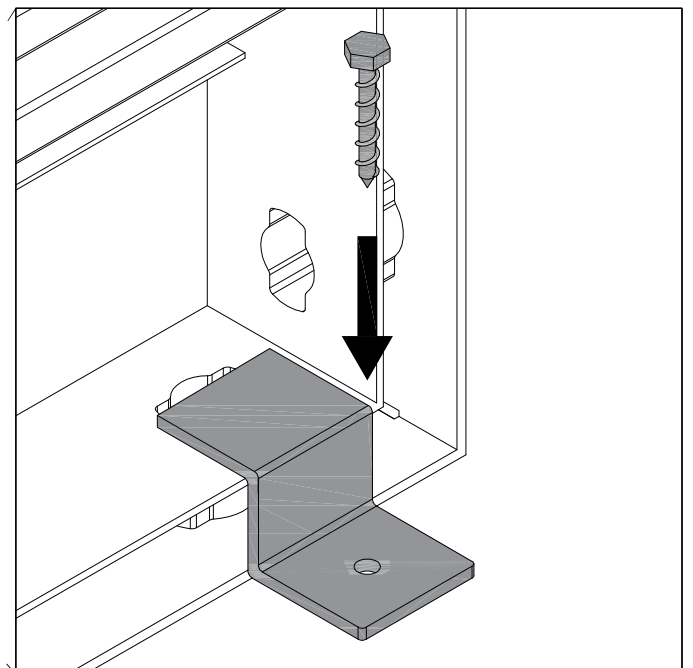
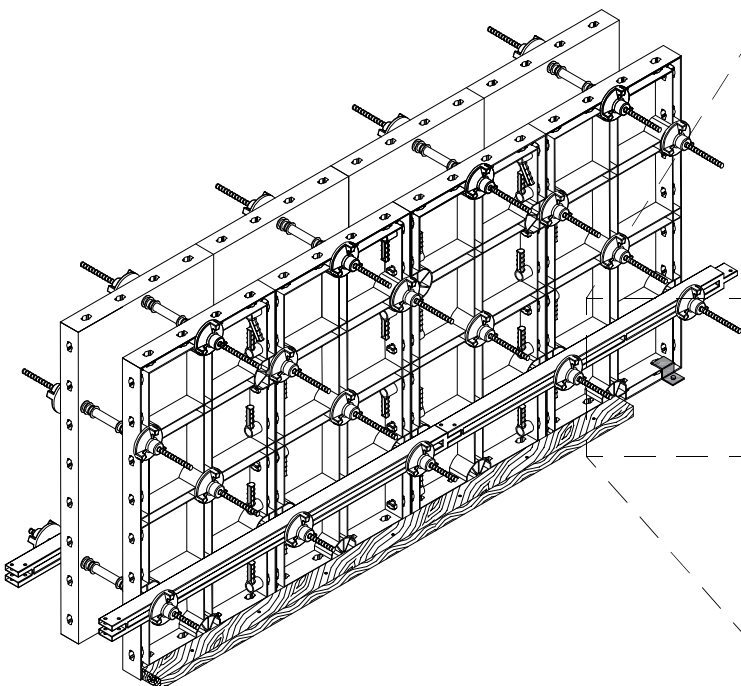
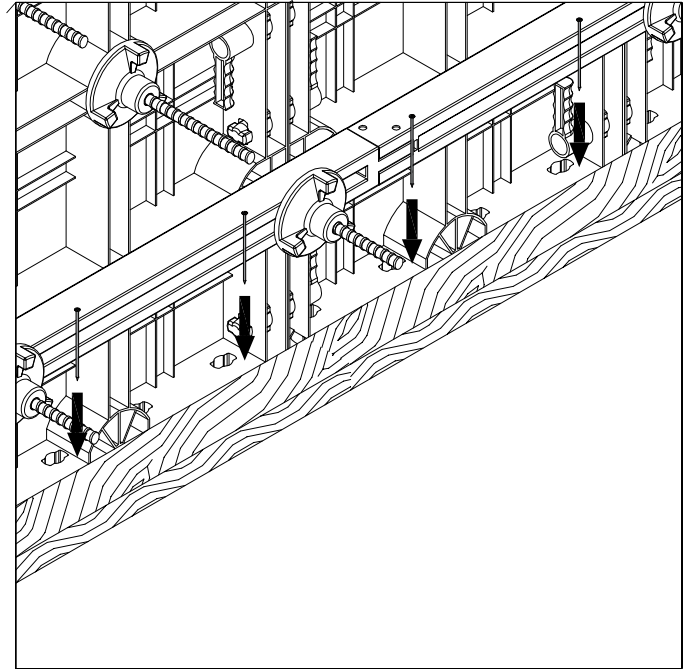
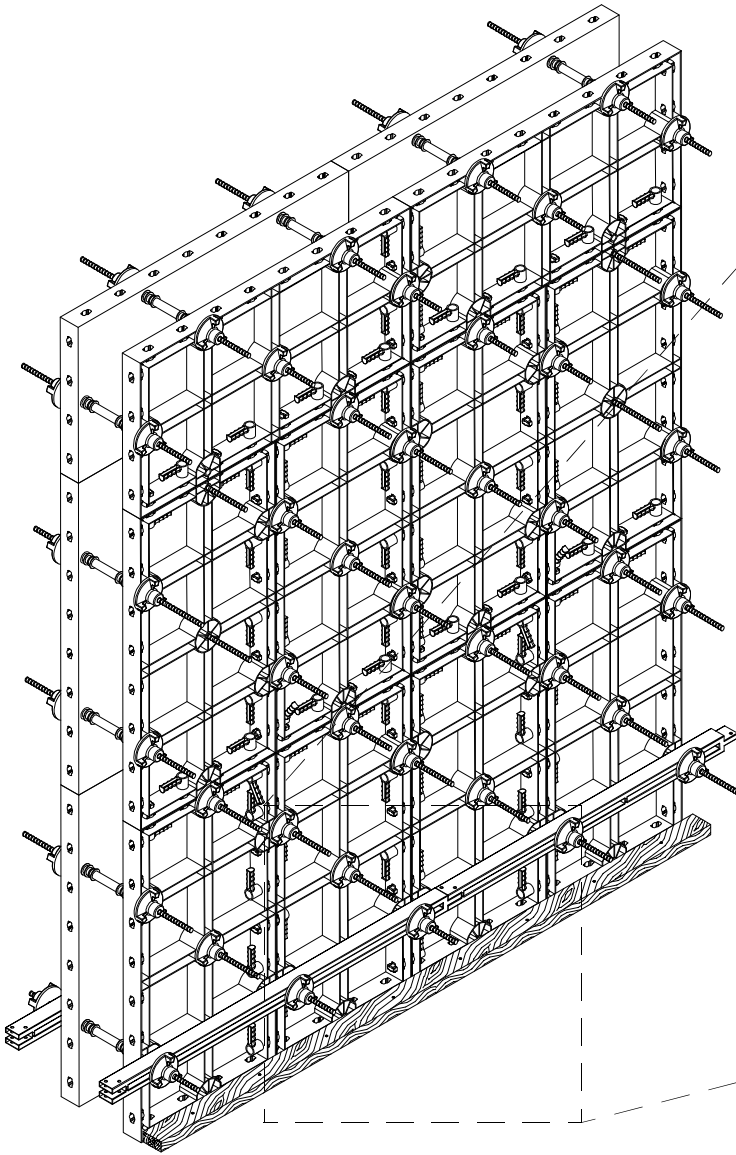
TOP VIEW



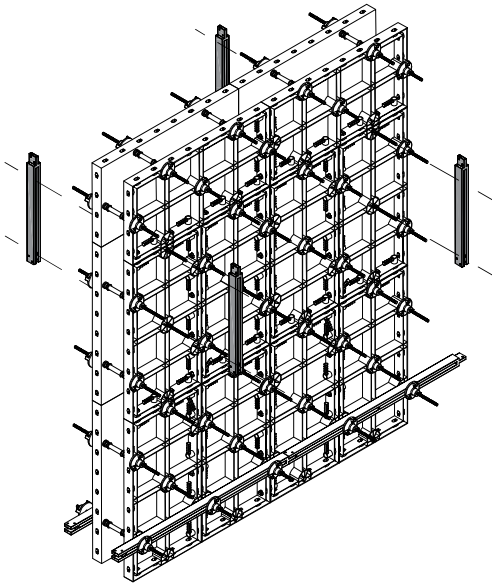


SIDE VIEW

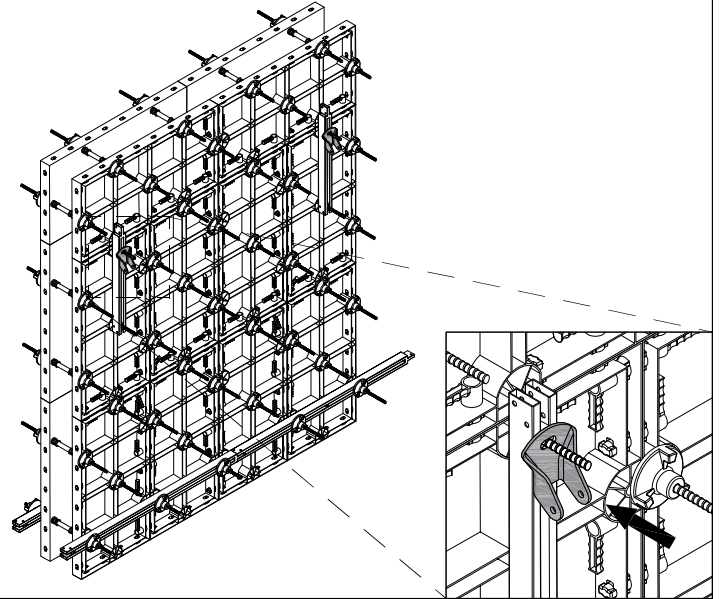




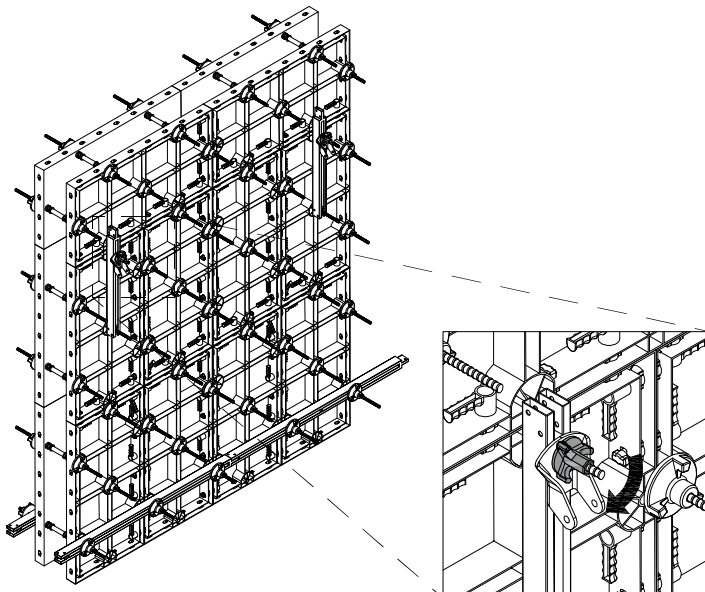
1. ALIGNMENT BARS INSTALLATION
INSTALLAZIONE BARRE ALLINEATRICI



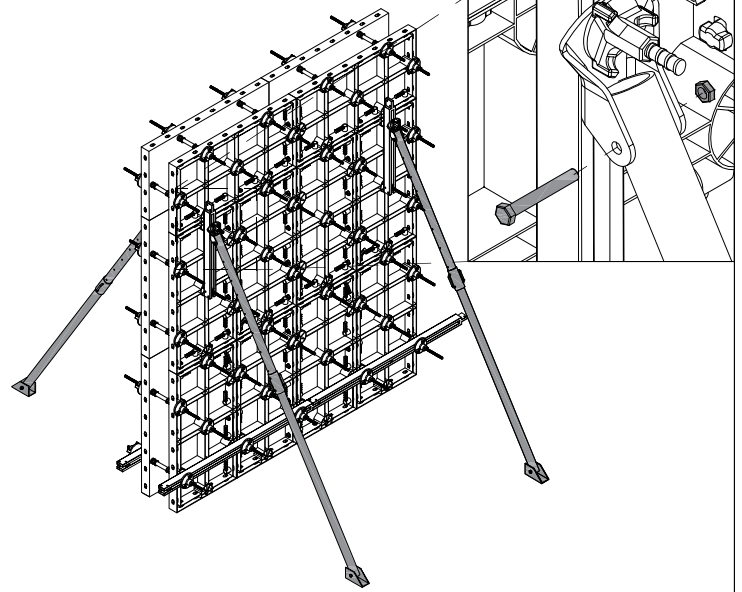
2. CONNECTOR PLATE INSTALLATION
INSTALLAZIONE PIASTRA STABILIZZATRICE



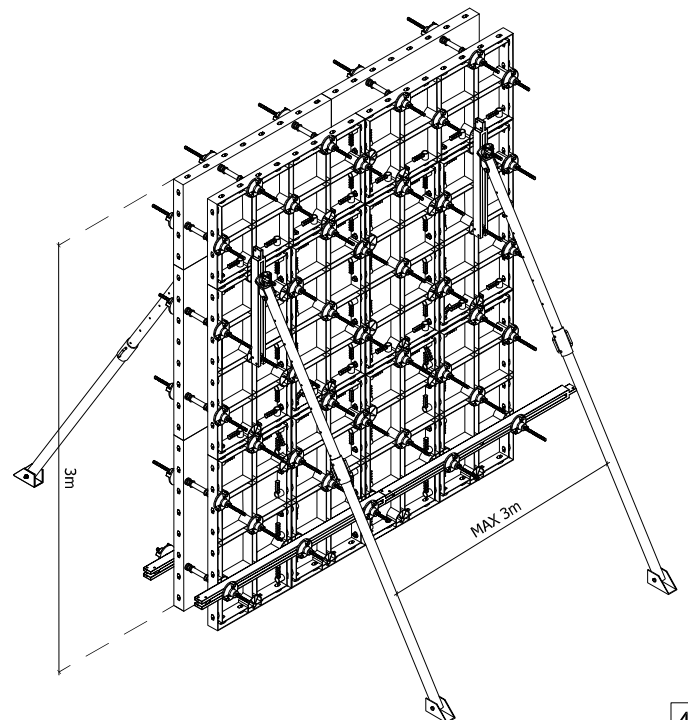
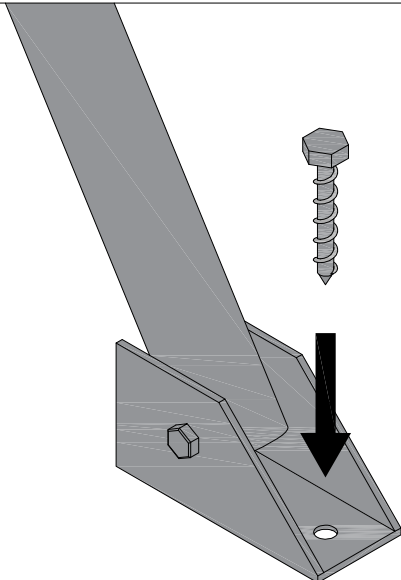
3. ANCHOR NUTS INSTALLATION
INSTALLAZIONE ROSETTE



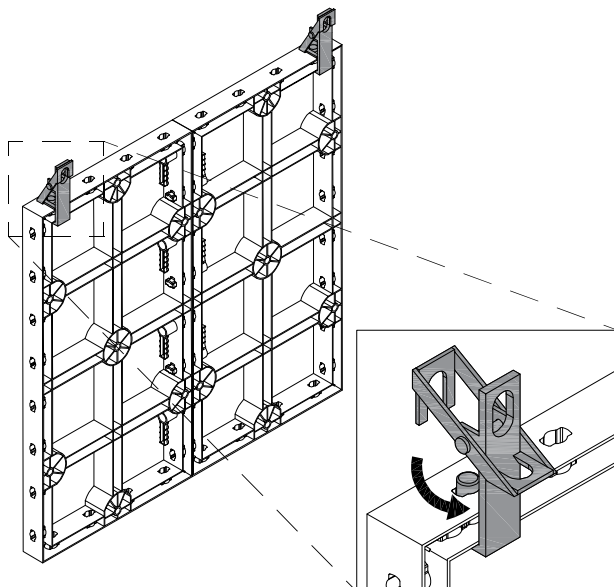
4. PUSH/PULL PROP INSTALLATION
INSTALLAZIONE PUNTELLO



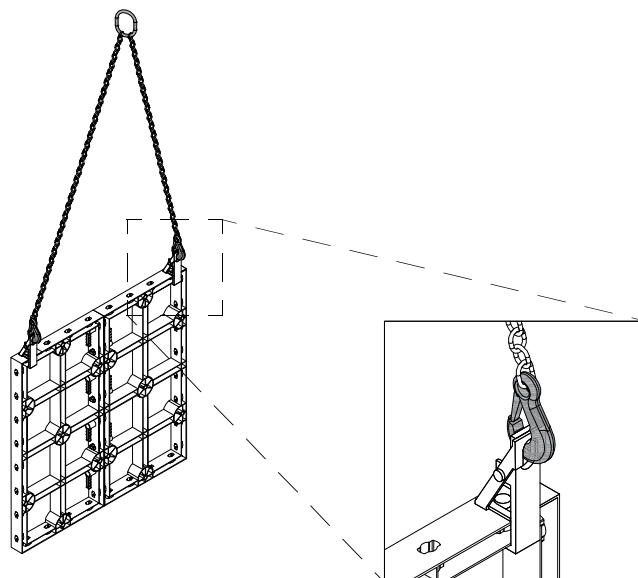
5. CONNECTION TO THE GROUND
CONNESSIONE A TERRA



1. LIFTING HOOK INSTALLATION
 INSTALLAZIONE GANCIO DI SOLLEVAMENTO

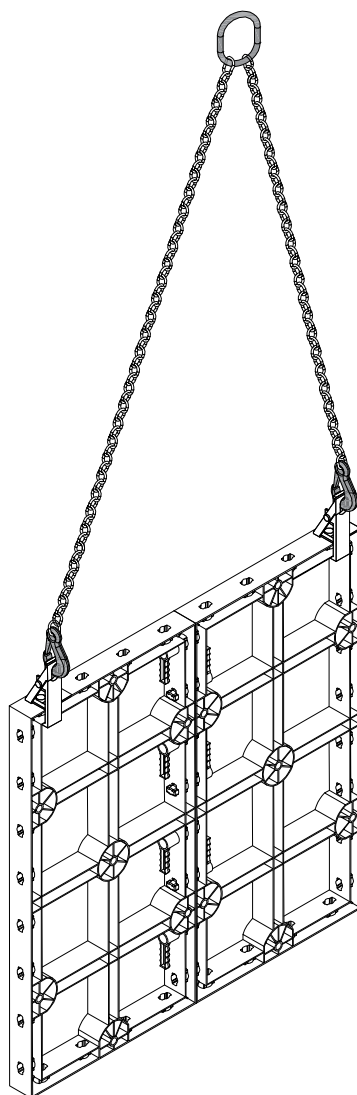


2. CHAIN INSTALLATION
 INSTALLAZIONE CATENA

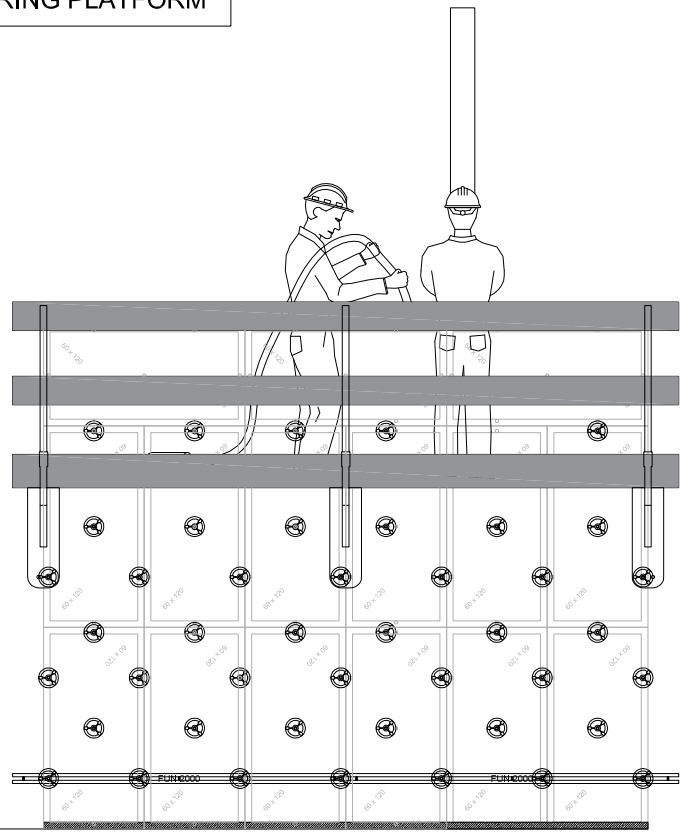
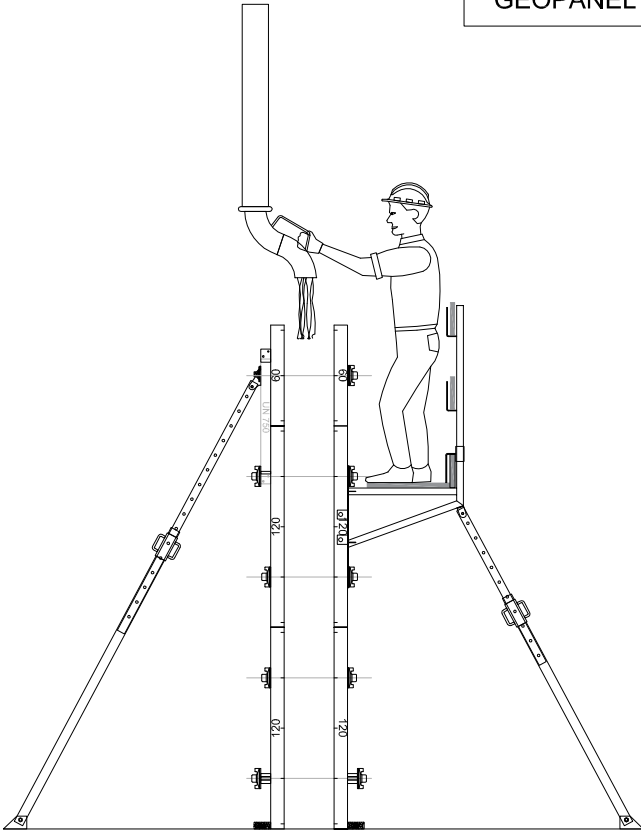


WARNING: LIFTING HOOK MAXIMUM CAPACITY: 1 kN (102 Kg)
 ATTENZIONE: CAPACITA' MASSIMA PER GANCIO: 1 kN (102 Kg)

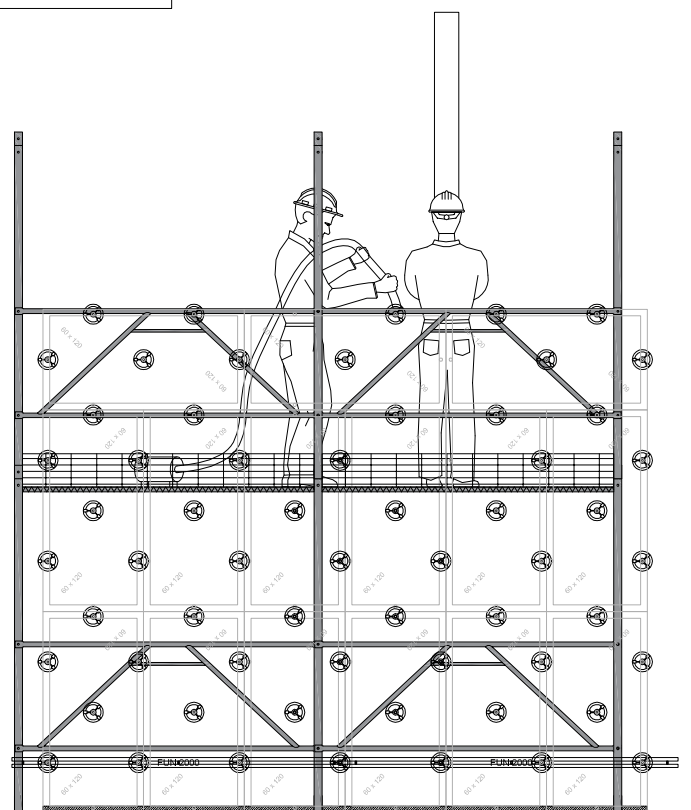
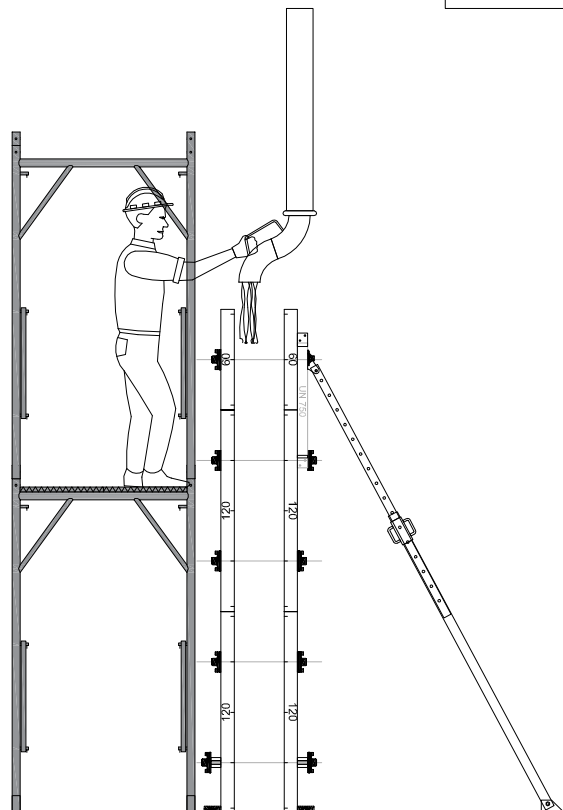
FINAL RESULT

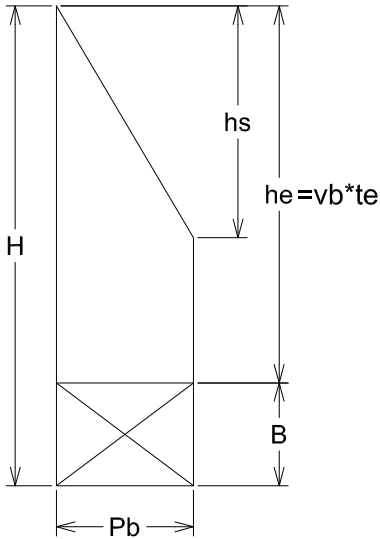


GEOPANEL POURING PLATFORM



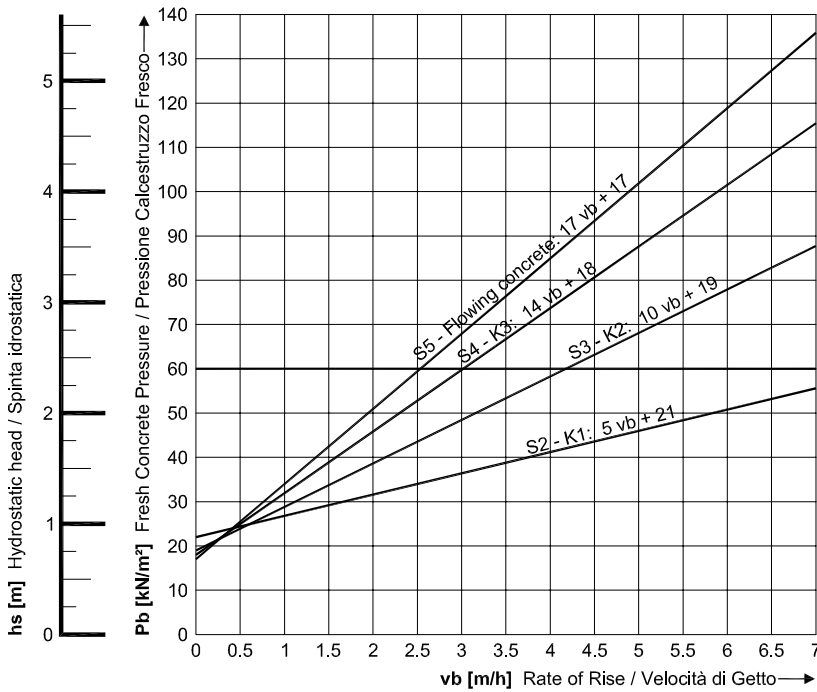
STEEL SCAFFOLDING





H = total height of the pour
 hs = height of hydrostatic pressure,
 i.e. maximum depth of fresh concrete pressure Pb
 he = pour height
 vb = pour speed
 te = time (hours) from the time of mixing until pour completed
 B = set concrete
 Pb = maximum horizontal value of the fresh concrete pressure on formwork

H = altezza totale del getto
 hs = altezza pressione idrostatica,
 ossia profondità massima della pressione del calcestruzzo fresco Pb
 he = altezza di getto
 vb = velocità di getto
 te = tempo (ore) dal momento della miscelazione fino al getto completato
 B = calcestruzzo solidificato
 Pb = massimo valore orizzontale della pressione del calcestruzzo fresco sul cassero



MAXIMUM PERMISSIBLE PRESSURE OF FRESH CONCRETE: 60kN

Assumptions:

- Specific weight of fresh concrete: 25 kN/m³
- Concrete set time: 5h
- Concrete temperature at placement: +15°C
- Concrete compacting with immersion vibrator

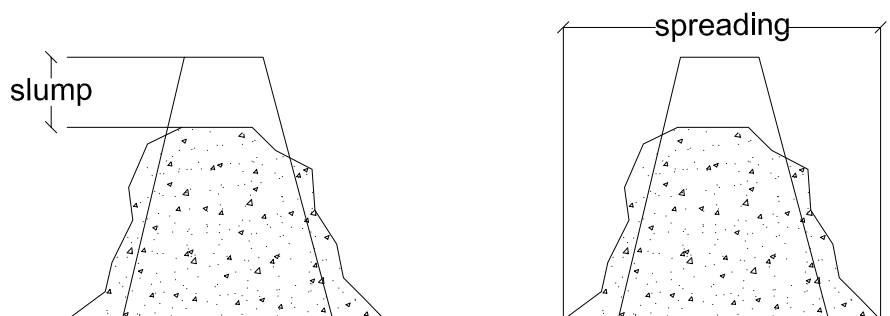
SPINTA MASSIMA DEL CALCESTRUZZO FRESCO SOPPORTATA DEL CASSERO: 60kN

Assunzioni:

- Peso specifico calcestruzzo compattato: 25 kN/m³
- Tempo di presa massimo: 5h
- Temperatura calcestruzzo al momento del getto: +15°C
- Compattazione con vibratori ad immersione

CONSISTENCY CLASS	CLASSE DI CONSISTENZA	UNI EN 206:2006		DIN 18218	
		CLASSIFICAZIONE CLASSIFICATION	SLUMP	CLASSIFICAZIONE CLASSIFICATION	SPREADING
wet	umida	S1	10 ÷ 40 mm		
stiff	plastica	S2	50 ÷ 90 mm	F1 (K1)	≤ 34 cm
plastic	semifluida	S3	100 ÷ 150 mm	F2 (K2)	35 ÷ 41 cm
soft	fluida	S4	160 ÷ 210 mm	F3 (K3)	42 ÷ 48 cm
flowing	superfluida	S5	≥ 220 mm	F4 (flowing)	49 ÷ 55 cm

ABRAMS CONE
 CONO DI ABRAMS



Use of retarding agent modify the concrete pressure through these coefficients.
 NOTE: according to UNI EN 206:2006 and UNI 11104:2004

Utilizzando agenti ritardanti la pressione del calcestruzzo deve essere modificata attraverso i seguenti coefficienti.
 NOTE: secondo normative UNI EN 206:2006 e UNI 11104:2004

CONSISTENCY CLASS	CLASSE DI CONSISTENZA	CLASSIFICATION / CLASSIFICAZIONE		SET TIME / TEMPO DI PRESA					
		UNI EN 206:2006	DIN 18218	5h	6h	7h	8h	9h	10h
stiff	plastica	S2	F1 (K1)	1.15	1.21	1.27	1.33	1.39	1.45
plastic	semifluida	S3	F2 (K2)	1.25	1.36	1.47	1.58	1.69	1.80
soft	fluida	S4	F3 (K3)	1.40	1.55	1.70	1.85	2.00	2.15

EXAMPLE:

In order to pour a wall with concrete consistency class S4 at a vb pour speed of 2.5 m/h, the Pb hydrostatic pressure will be 53 kN/m² at a hs depth of 2.20 m (TAB A).

As the formwork accepts a maximum pressure of 60 kN/m², the above example fully satisfies the safety requirements.

Should a retardant admixture be added to the above class S4 concrete, increasing the setting time of the concrete to 6h, the new calculated value is:

Pb = 53 kN/m² * 1.55 = 82.15 kN/m² (TAB B), where 1.55 indicates the pressure amplifying factor given by the retardant admixture.

In this case the maximum pressure is greater than 60 kN/m² thus it will be necessary to reduce the pour speed vb, for example equals to 1.5 m/h (TAB B).

ESEMPIO:

Dovendo eseguire un getto di un muro con un calcestruzzo classe S4 ad una velocità di getto vb di 2.5 m/h, si avrà una spinta idrostatica Pb pari a 53 kN/m² ad una profondità hs di 2.20 m (TAB A).

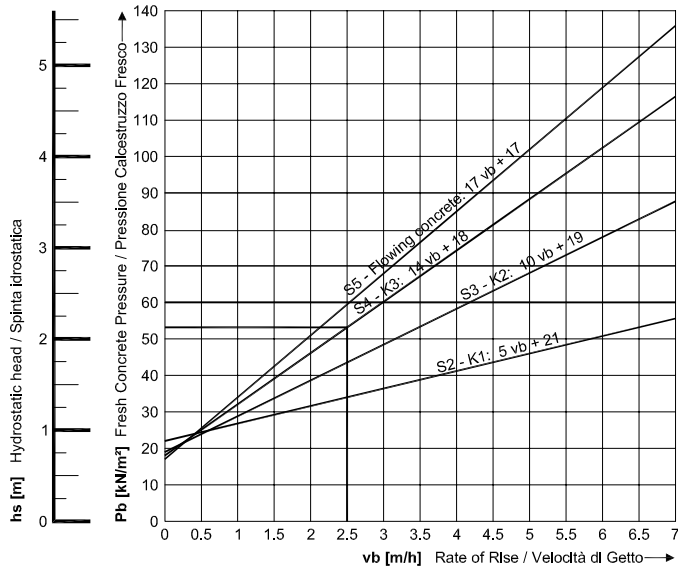
Poichè i casseri sopportano una spinta massima di 60 kN/m², l'esempio sopra riportato soddisfa pienamente le prescrizioni di sicurezza.

Se dovessimo aggiungere un agente ritardante al calcestruzzo S4 all'esempio di cui sopra, ed avendo un tempo di presa pari a 6h, il nuovo calcolo della spinta sarà:

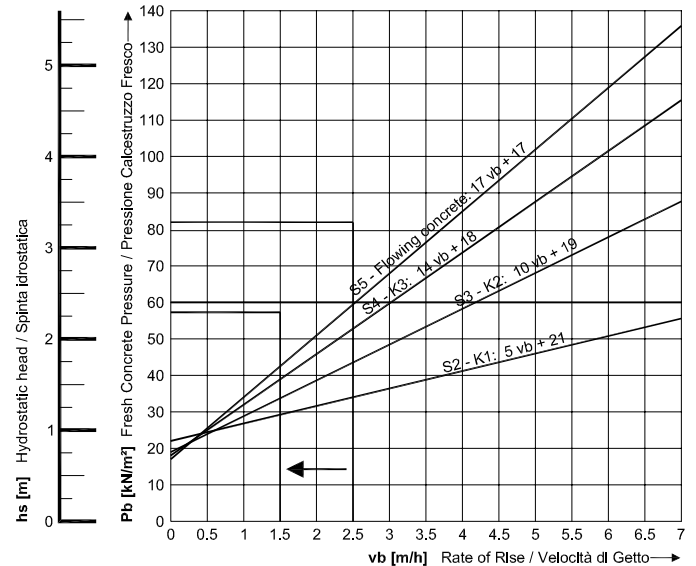
Nuovo valore Pb = 53 kN/m² * 1.55 = 82.15 kN/m² (TAB B), essendo 1.55 il coefficiente amplificativo della pressione dovuta all'agente ritardante.

In questo caso la spinta massima sarà superiore a 60kN/m² e quindi sarà necessario ridurre la velocità di getto, ad esempio pari a 1.5 m/h (TAB B).

TAB A



TAB B



SAFETY NOTICE

THE INFORMATION CONTAINED IN THIS MANUAL APPLIES TO COLUMN FORMWORK OF TOTAL HEIGHT NOT EXCEEDING 3 METRES. IN CASE OF FORMWORK HIGHER THAN 3 METRES PLEASE CONTACT THE GEOPLAST TECHNICAL DEPT.

AVVISO DI SICUREZZA

LE INDICAZIONI RIPORTATE IN QUESTO MANUALE SONO APPLICABILI A CASSERI PER COLONNE NON SUPERIORI AI 3 METRI.

PER ALTEZZE SUPERIORI AI 3 METRI CONTATTARE L'UFFICIO TECNICO GEOPLAST.

POUR

Only immersion type concrete vibrators are approved for use. The ABS formwork is not fireproof, do not place close to free flame or hot objects.

HANDLING

Use the lifting clamp to transport the formwork with a crane. Before lifting make sure the load is symmetrical and that the leg lengths are equal. Follow the diagram on p. 25 for the correct use of the lifting clamp.

CLEANING THE PANELS

After each use clean the panel with water, preferably using a pressure washer. Any residual concrete should be removed with the aid of a brush or a steel scraper.

RELEASING AGENT

As long as the contact surface of the panels does not show signs of wear, no releasing agent is required.

STORAGE

In order to facilitate the handling and lifting of the panels and all accessories, please store them on wood pallets or battens in order to keep them off the ground.

Although the product does not suffer weathering, for longer lifetime it is preferable to store the panels away from direct sunlight.

GETTO

Sono ammessi solamente sistemi di vibrazione ad immersione. Il cassero un ABS non è ignifugo, non porre a contatto diretto con corpi incandescenti o a fiamma libera.

MOVIMENTAZIONE

Utilizzare il gancio per Geopanel per sollevare i pannelli con gru e, prima della movimentazione, assicurarsi che le funi di sollevamento abbiano un uniforme tiraggio. Seguire lo schema di pag. 44 per il corretto utilizzo del gancio.

PULIZIA DEI PANNELLI

Al termine di ogni utilizzo, pulire i pannelli con getti di acqua (preferibilmente utilizzando una idropulitrice). Si consiglia di rimuovere eventuali incrostazioni del calcestruzzo con l'ausilio di una spatola o spazzola d'acciaio.

DISARMANTE

Finché la superficie di contatto dei pannelli non presenta segni di usura, non è necessario l'utilizzo di disarmanti.

STOCCAGGIO

Al fine di facilitare le operazioni di movimentazione e sollevamento dei pannelli e tutti gli accessori, stoccare gli stessi sopra bancali o comunque morali che permettano il distacco da terra.

Sebbene il prodotto non tema attacchi da agenti atmosferici è preferibile stoccare i pannelli in luoghi asciutti e riparati dalla luce diretta del sole.

SAFETY REQUIREMENTS

PRESCRIZIONI DI SICUREZZA

The operations of placing, assembly, disassembly, plumb, handling and cleaning of the Geopanel product, as well as the pouring of the concrete must be carried out by qualified and properly trained personnel, or under the supervision of the Site Manager or an Engineer of Geoplast SpA, who must ensure that:

- all the above operations are carried out in a workmanlike manner,
- every person working with the formwork is equipped with suitable tools and personal protective equipment to perform all necessary actions in compliance with the safety standards,
- all panels and the supplied accessories are checked before use, and that any part that does not meet the minimum standards of reliability and safety due to deformation or breakage is discarded,
- the formwork is installed on a perfectly flat surface, so as to work in maximum safety conditions and guarantee perfect propping and plumb,
- all connection, alignment and plumb accessories of the formwork are tight and fixed to the ground before beginning the pour.

Geoplast SpA disclaims any liability arising from improper use of the formwork Geopanel. Any assembly of formwork and/or use of accessories otherwise described in this manual must first be approved by Geoplast SpA.

Le operazioni di posizionamento, montaggio, smontaggio, messa a piombo, movimentazione e pulizia del prodotto Geopanel, nonché del getto del calcestruzzo, devono essere effettuate da personale competente e debitamente istruito o comunque sotto il controllo del responsabile di cantiere oppure di un tecnico Geoplast SpA, i quali devono assicurarsi che:

- tutte le operazioni sopra elencate vengano svolte a regola d'arte,
- gli addetti alle operazioni sopra elencate siano muniti di idonea strumentazione e di dispositivi di protezione individuale per poter effettuare tutte le azioni nel pieno rispetto delle norme di sicurezza,
- tutti i pannelli e gli accessori in dotazione vengano controllati prima del loro utilizzo, in modo tale da poter eliminare quelli che non abbiano sufficiente garanzia di affidabilità a causa di eventuali presenze di rotture e/o deformazioni,
- il piano di appoggio dei casseri sia perfettamente piano, in modo da poter operare in massima sicurezza e garantire la perfetta puntellazione e piombatura dei pilastri,
- tutti gli accessori di collegamento, di allineamento e di piombatura dei casseri, siano ben serrati e fissati al suolo prima di iniziare le operazioni di getto.

Geoplast SpA declina ogni responsabilità derivante da un uso improprio dei casseri Geopanel. Eventuali assemblaggi dei casseri e/o uso di accessori diversamente illustrati in questo manuale, devono essere prima approvati da Geoplast SpA.



Building beyond together

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rev.001
05/2016