



ESCOLA UNIVERSITARIA  
D'ARQUITECTURA TECNICA

UNIVERSIDAD POLITÉCNICA DE CATALUÑA

ESCOLA UNIVERSITARIA

D'ARQUITECTURA TECNICA

APUNTS D'OFICINA TECNICA

DETALLES

UNIVERSITAT POLITÈCNICA DE CATALUNYA  
Biblioteca



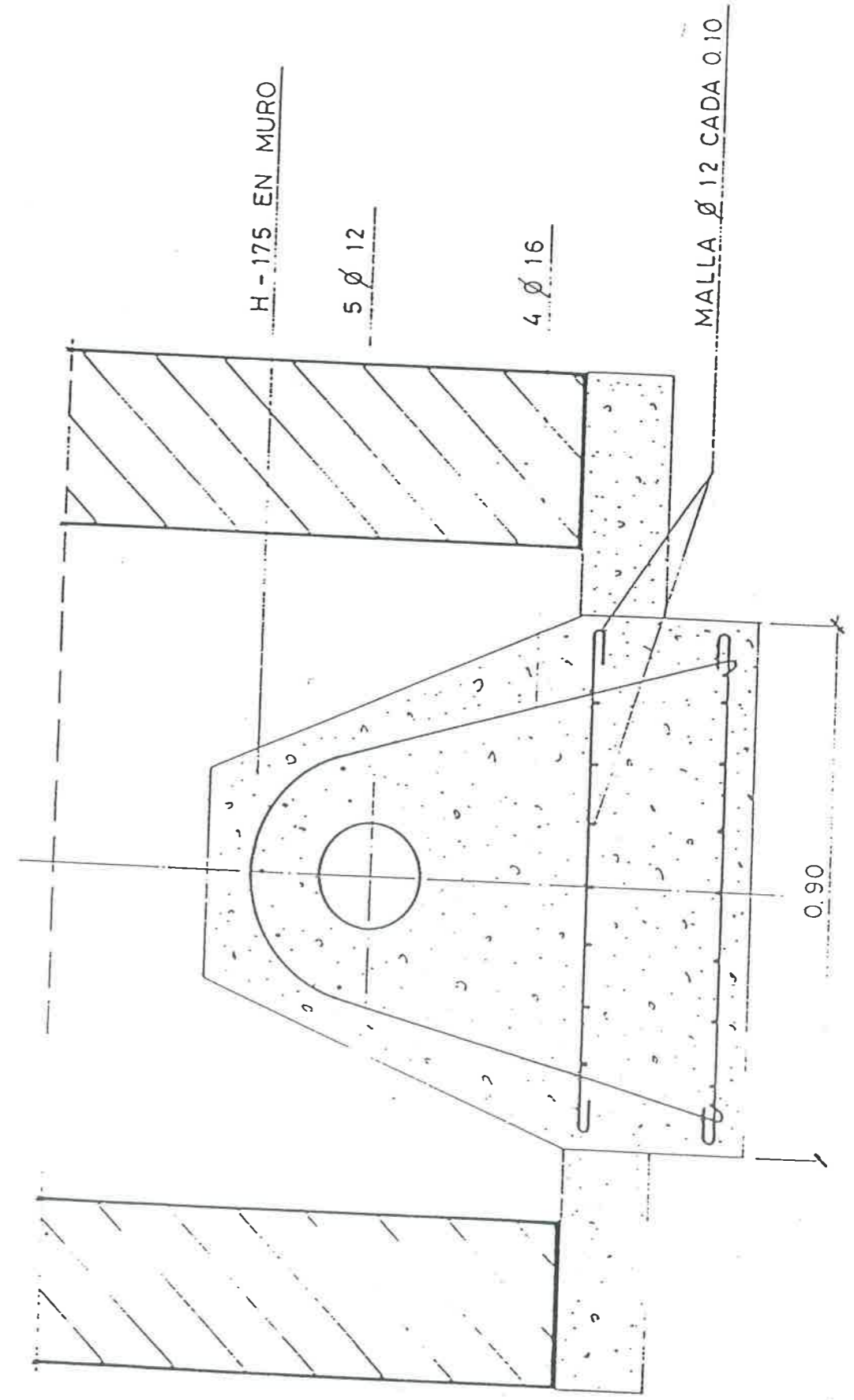
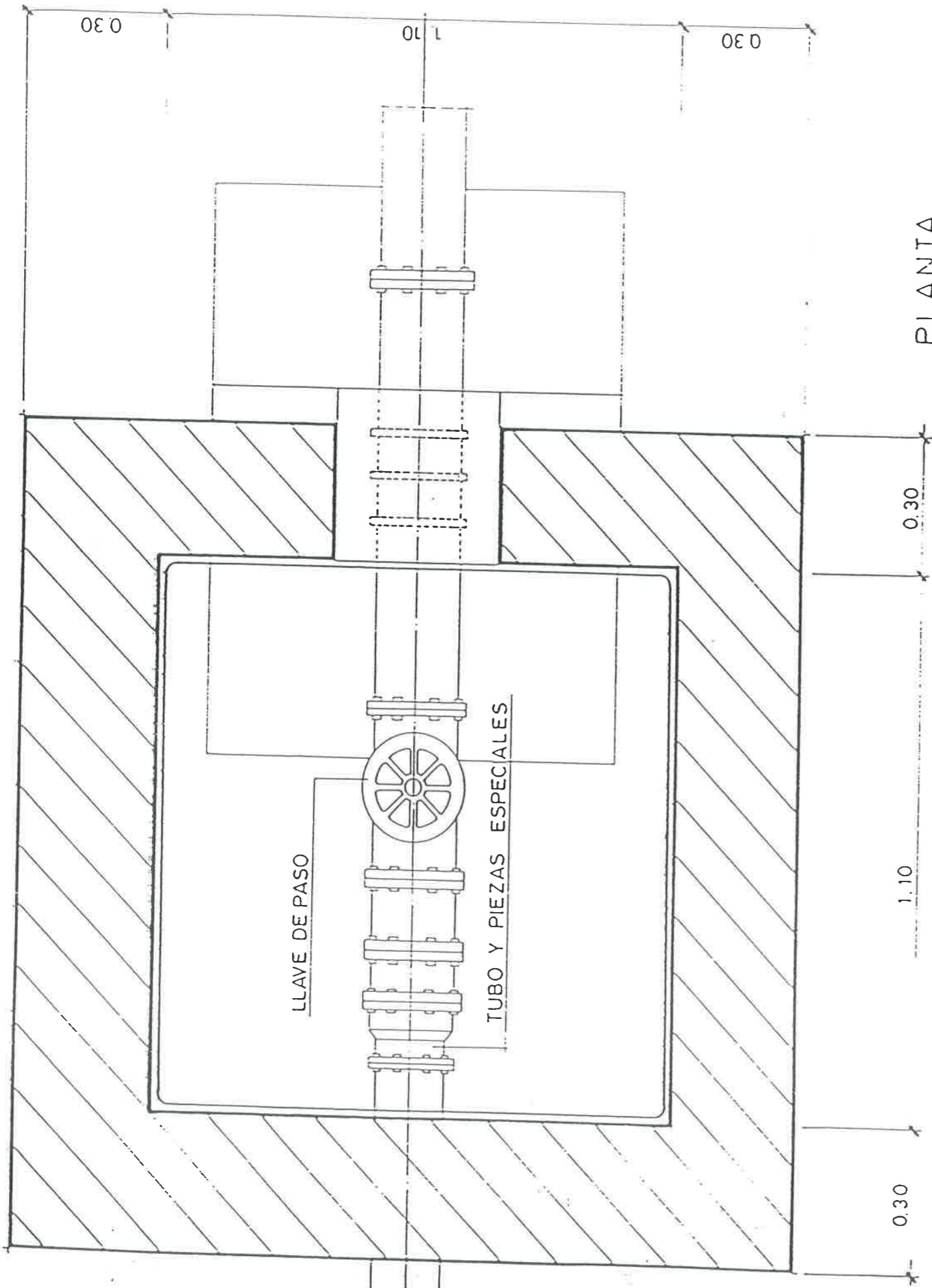
1400246119

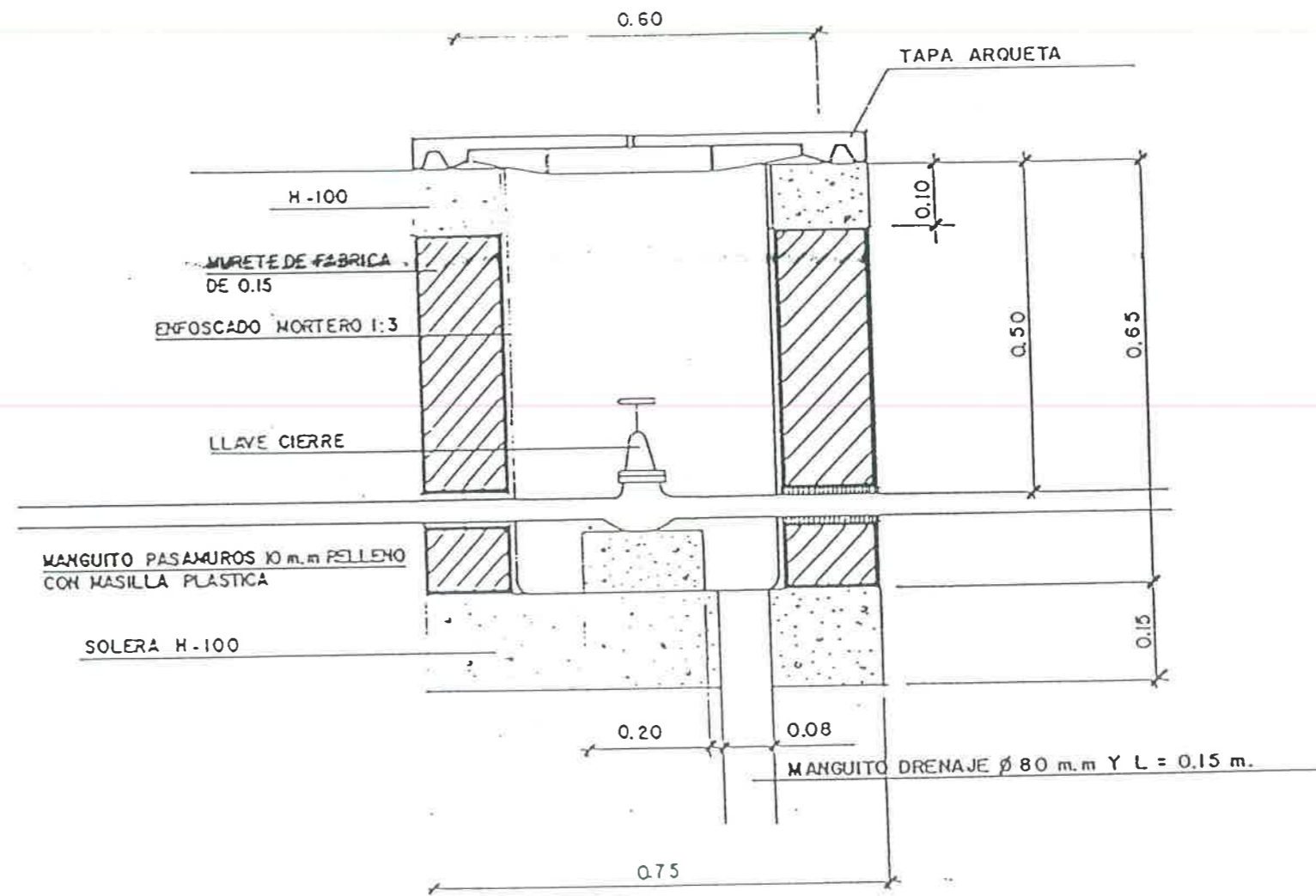
CATEDRATICO: JESUS GANDULLO  
PROFESORES: BLANCA FIGUERAS  
CESAR GALLOFRE

70 4 69  
076.6  
Jan



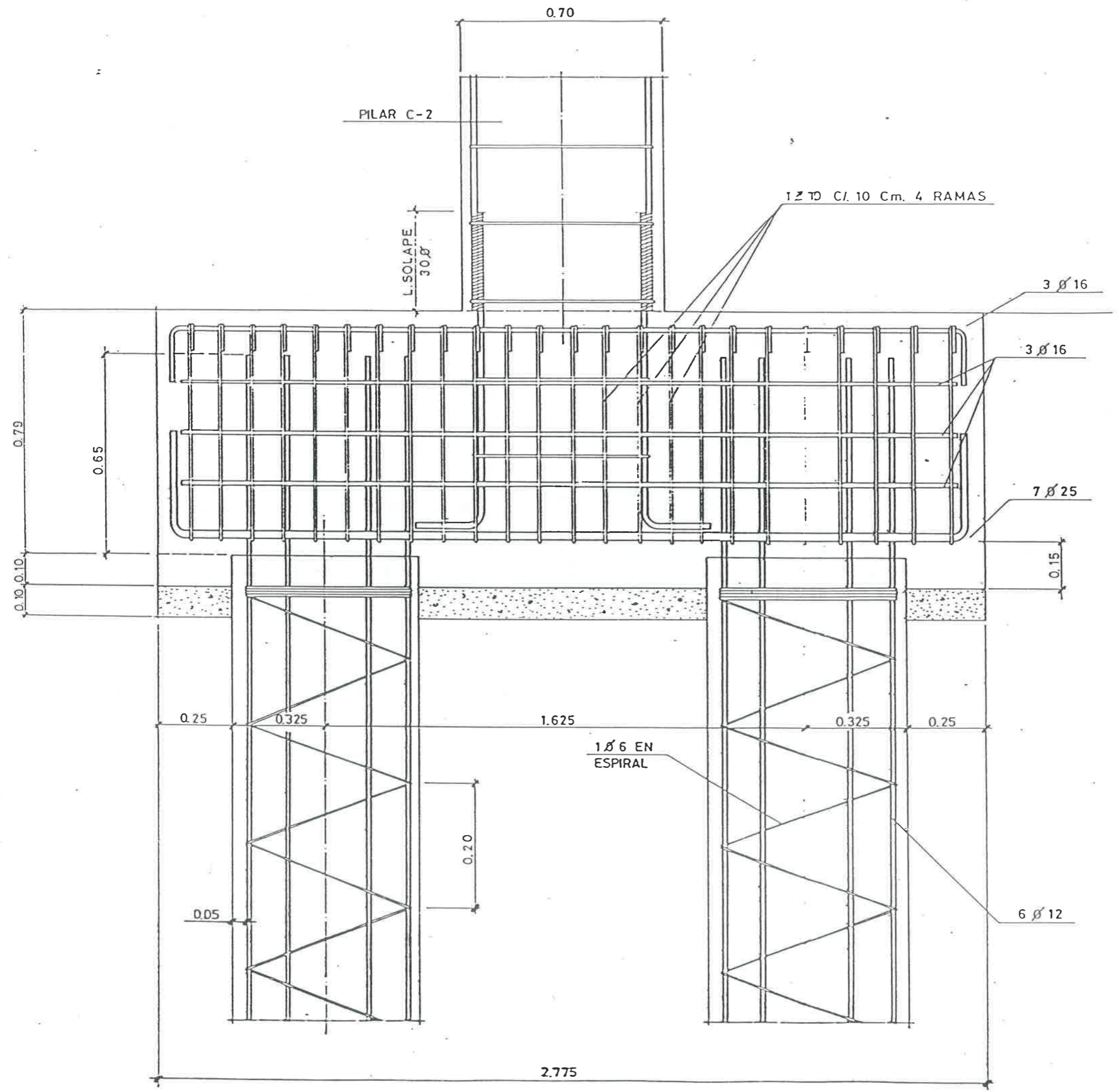






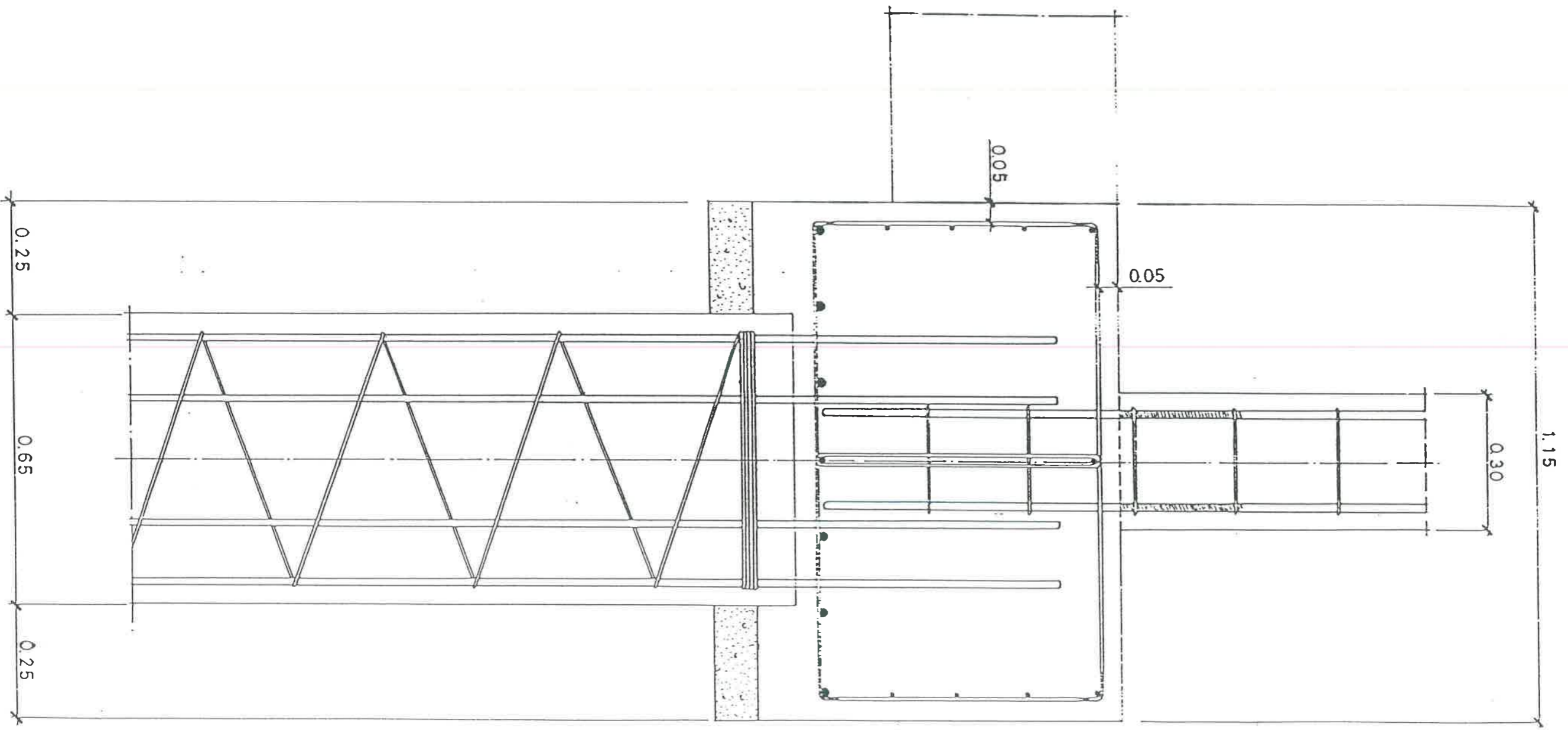
**ARQUETA ACOMETIDA GAS**  
 ESC. 1:10

14007-15-142  
CO A @ 3 OFICINA TECNICA  
Cables de acero

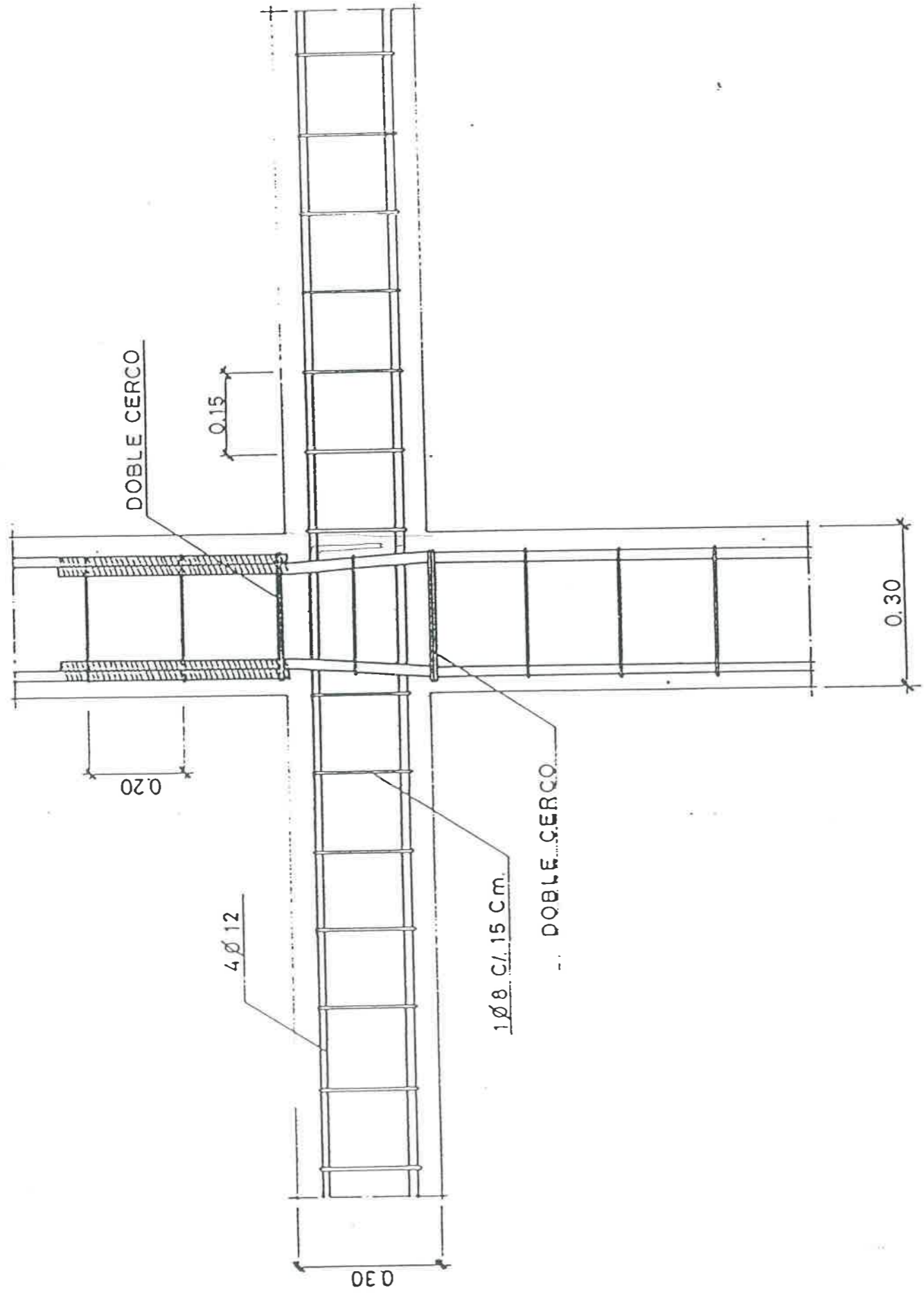


BIBLIOTECA  
BIBLIOTECA



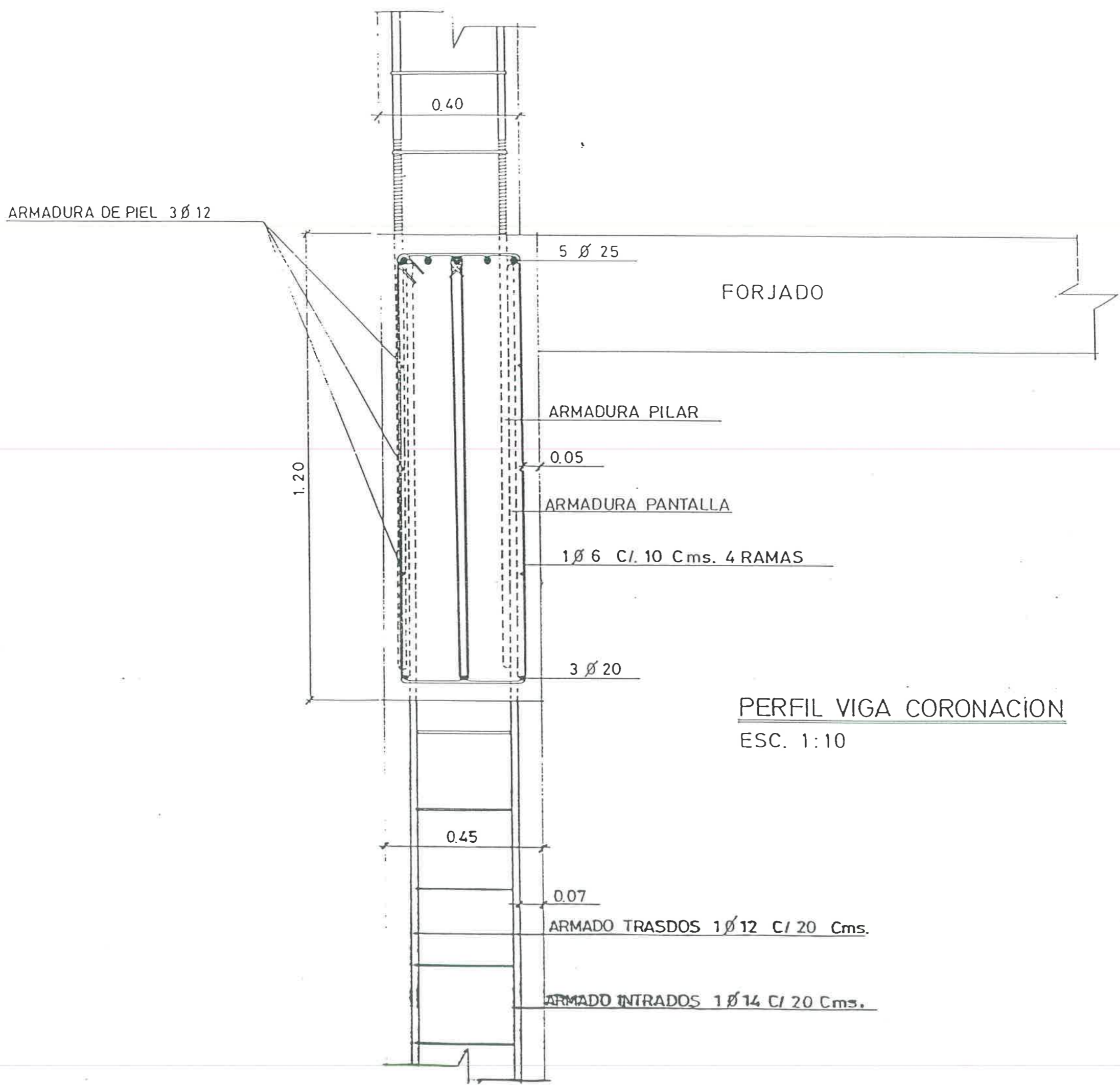


PERFIL DETALLE ENCEPADO  
ESCALA. 1:10

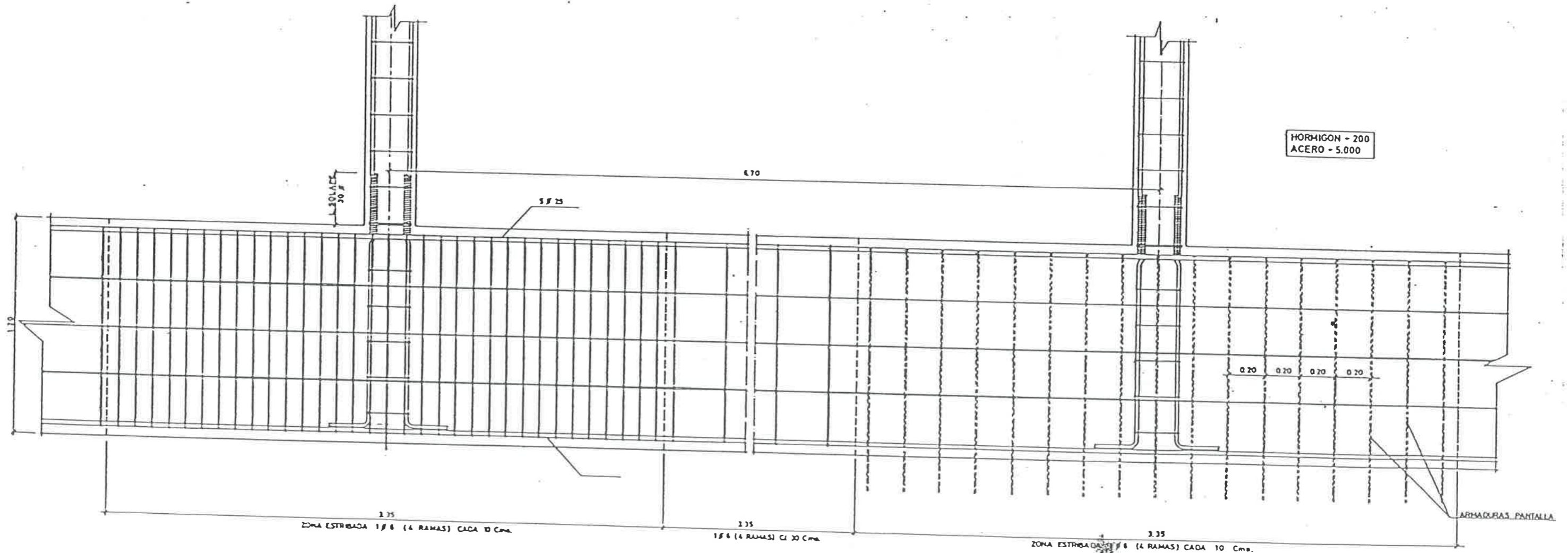


ENCUENTRO PILAR-RIOSTRA  
 ESCALA. 1:10

HORMIGON - 175  
 ACERO - 4.200







HORMIGON - 200  
ACERO - 5.000

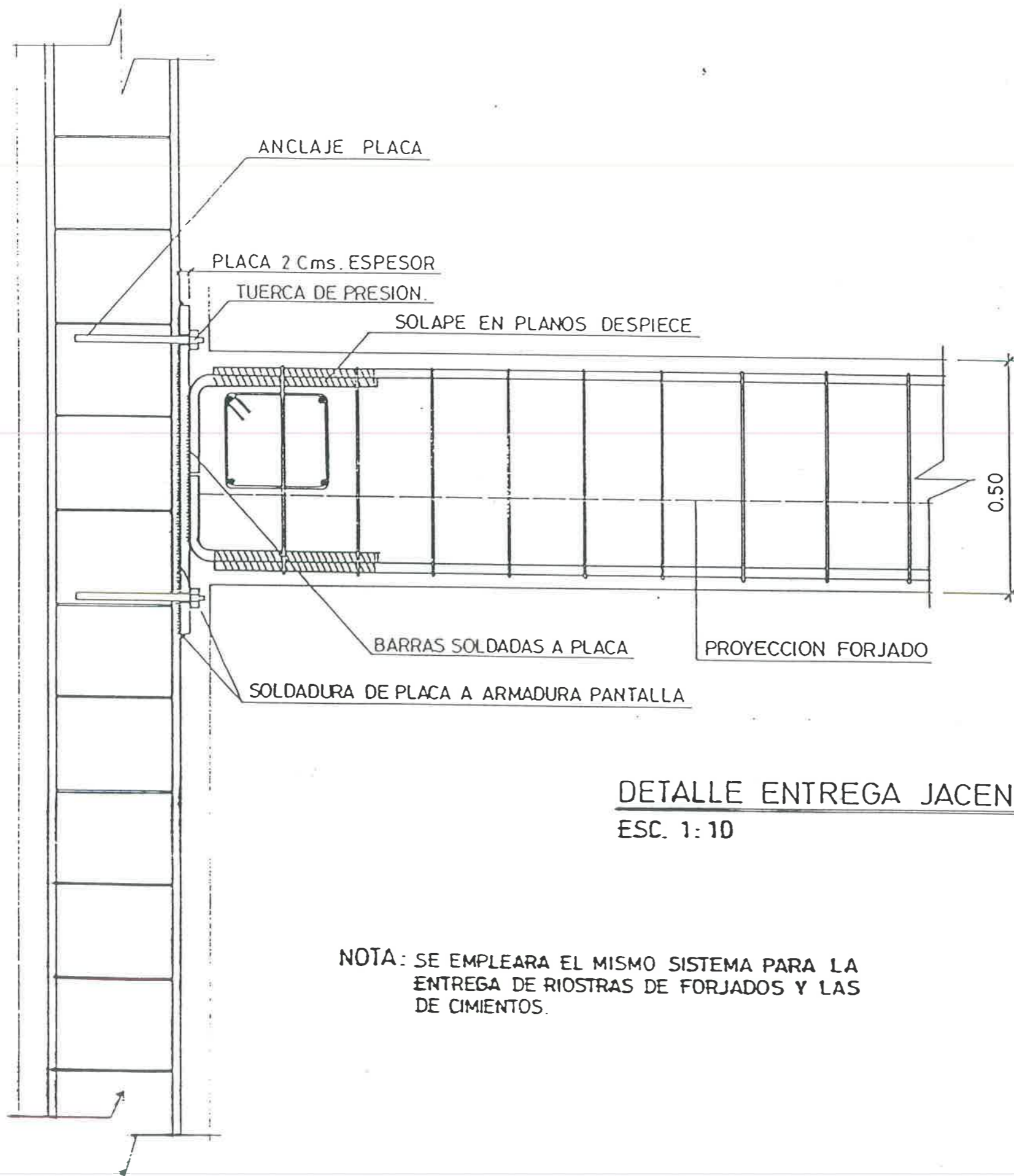
3.35  
ZONA ESTREBADA 1/8 (4 RAMAS) CADA 20 Cms.

3.35  
18/8 (4 RAMAS) C/ 20 Cms.

3.35  
ZONA ESTREBADA 1/8 (4 RAMAS) CADA 20 Cms.

ALZADO VIGA CORONACION  
ESC. 1:10

ARMAZONES PANTALLA

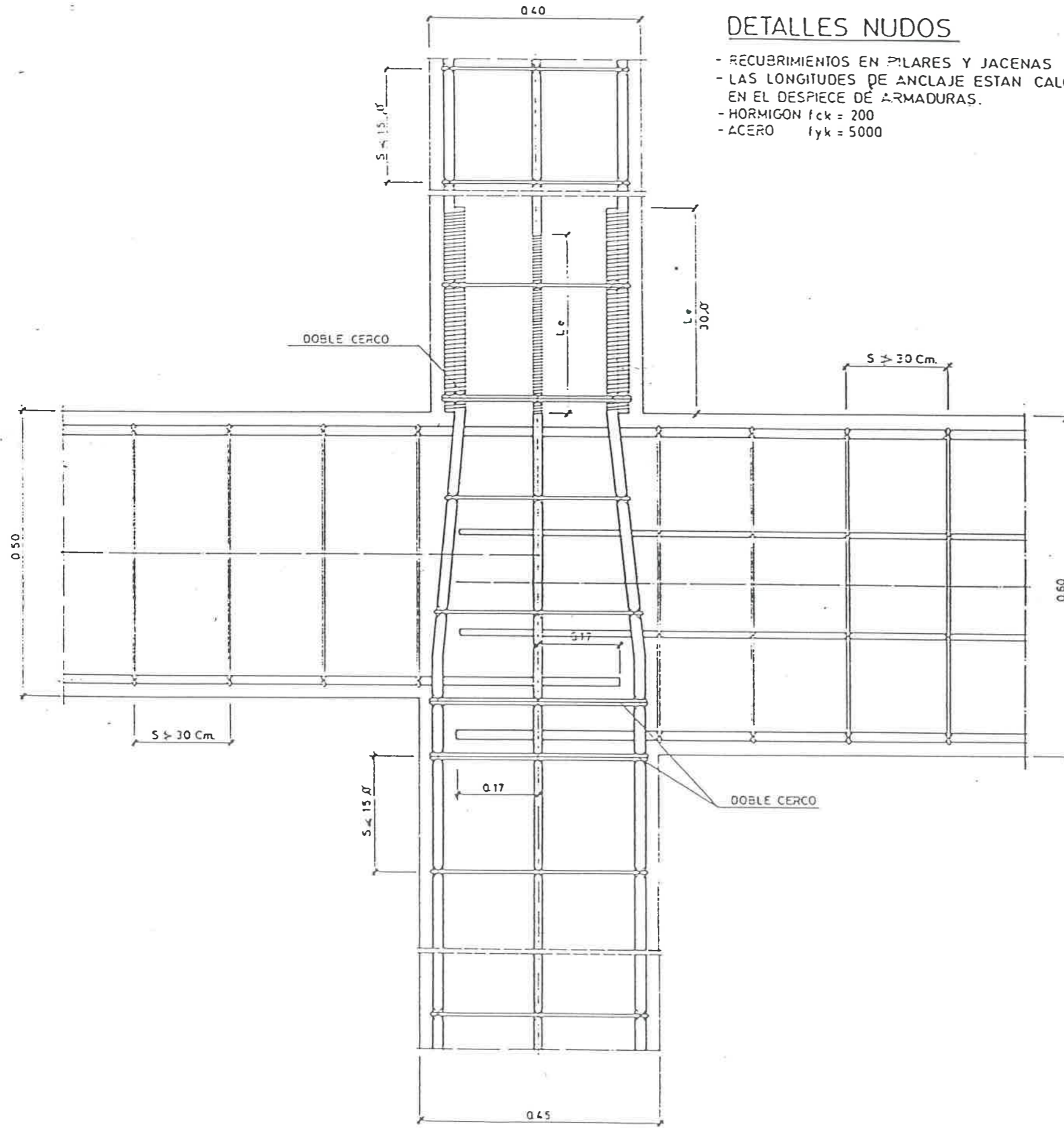


DETALLE ENTREGA JACENA CON PANTALLA  
ESC. 1:10

NOTA: SE EMPLEARA EL MISMO SISTEMA PARA LA ENTREGA DE RIOSTRAS DE FORJADOS Y LAS DE CIMENTOS.

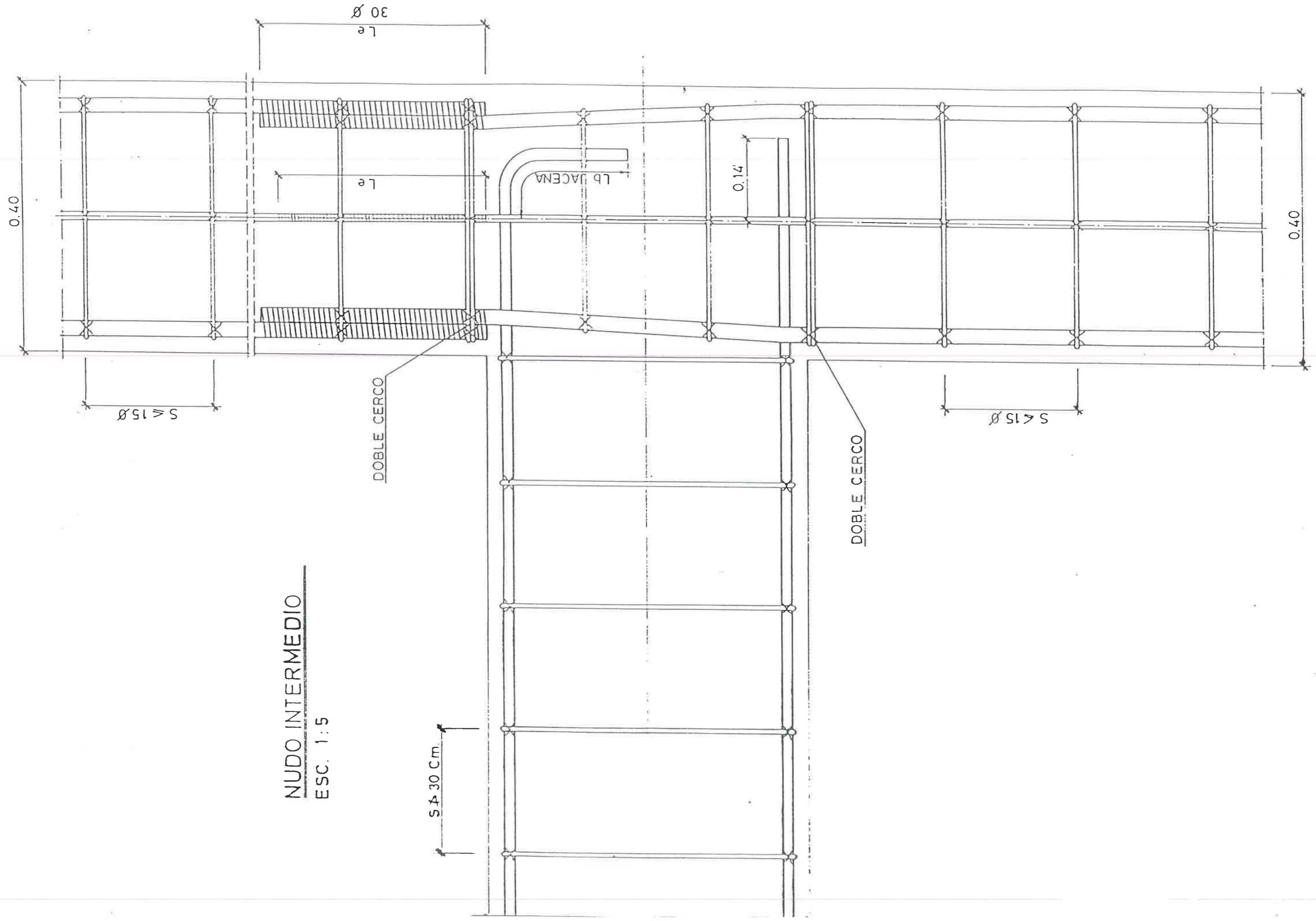
### DETALLES NUDOS

- RECUBRIMIENTOS EN PILARES Y JACENAS 3 Cm.
- LAS LONGITUDES DE ANCLAJE ESTAN CALCULADAS EN EL DESPIECE DE ARMADURAS.
- HORMIGON  $f_{ck} = 200$
- ACERO  $f_{yk} = 5000$



NUDO INTERMEDIO B





NUDO INTERMEDIO  
ESC. 1:5

DOBLE CERCO

DOBLE CERCO

$S \leq 15\varnothing$

$S \leq 15\varnothing$

$S \leq 30 \text{ cm}$

$\varnothing 30$   
Le

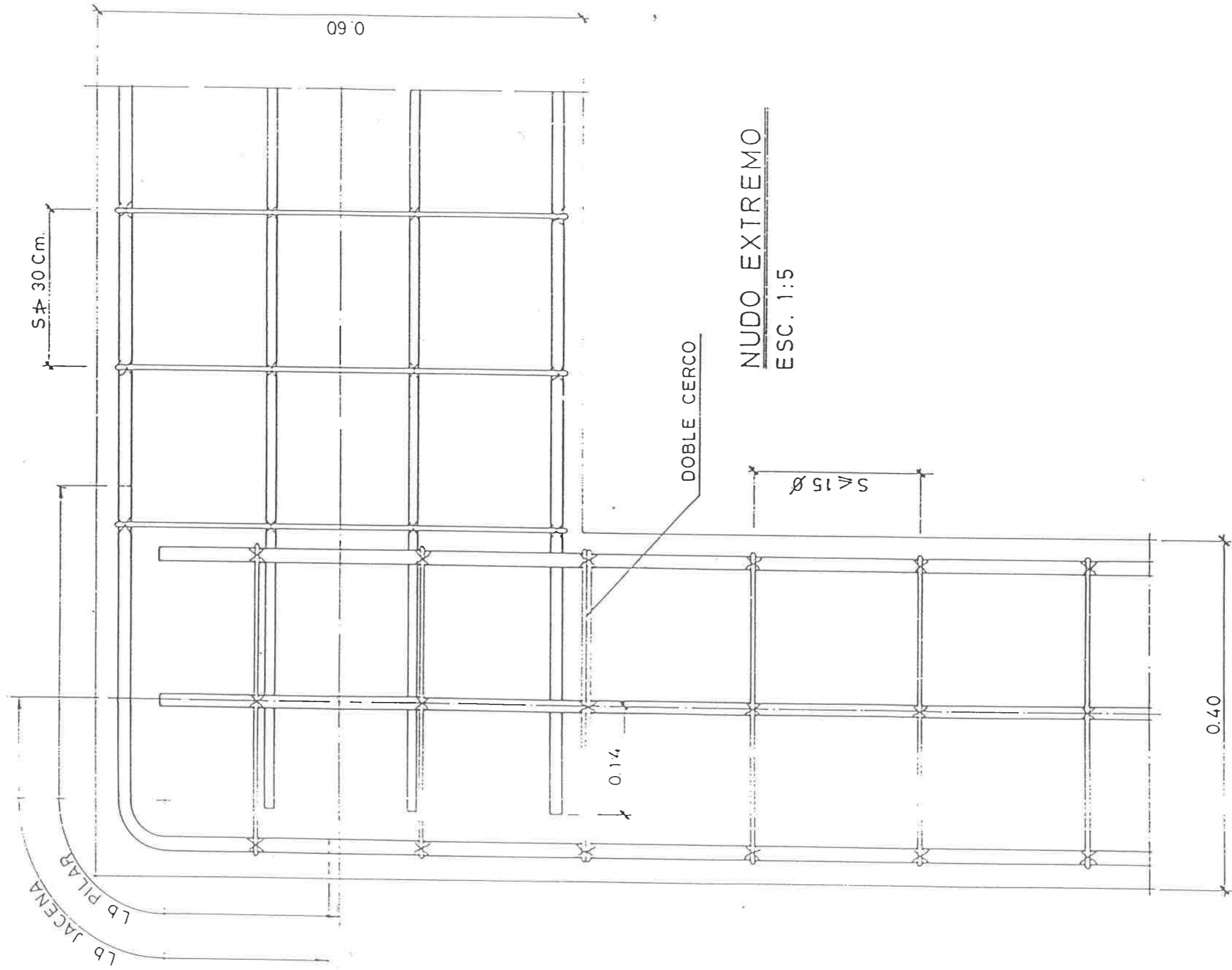
Le

0.14

Lb JACENA

0.40

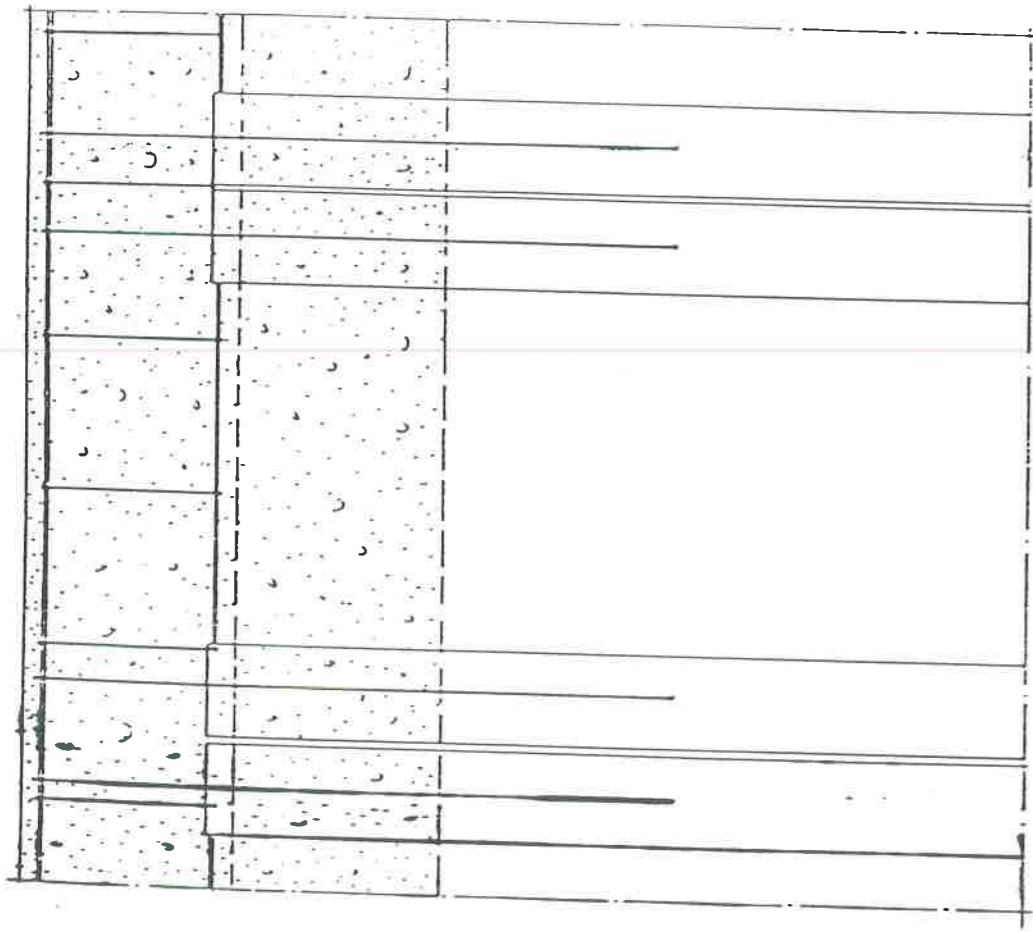
0.40



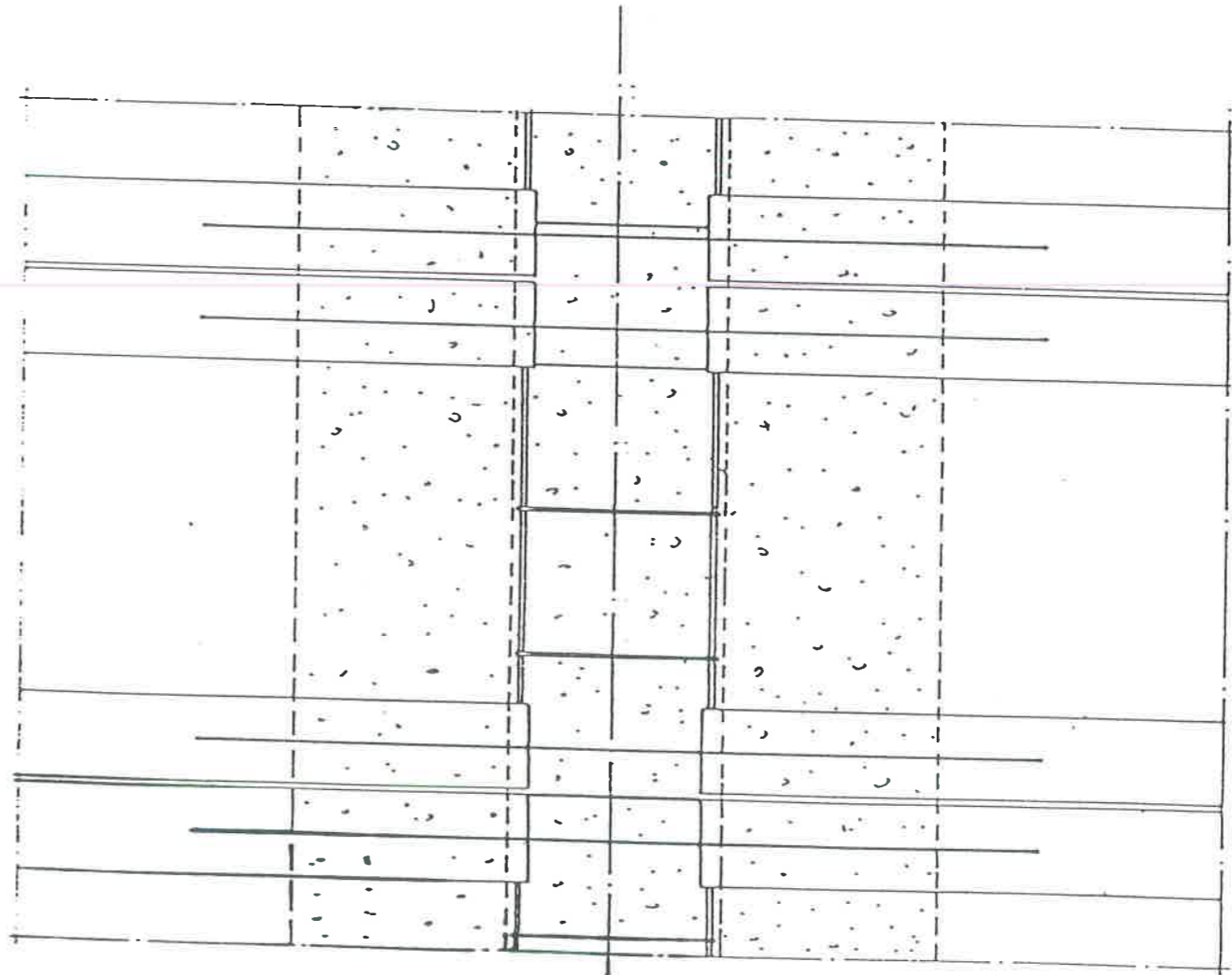




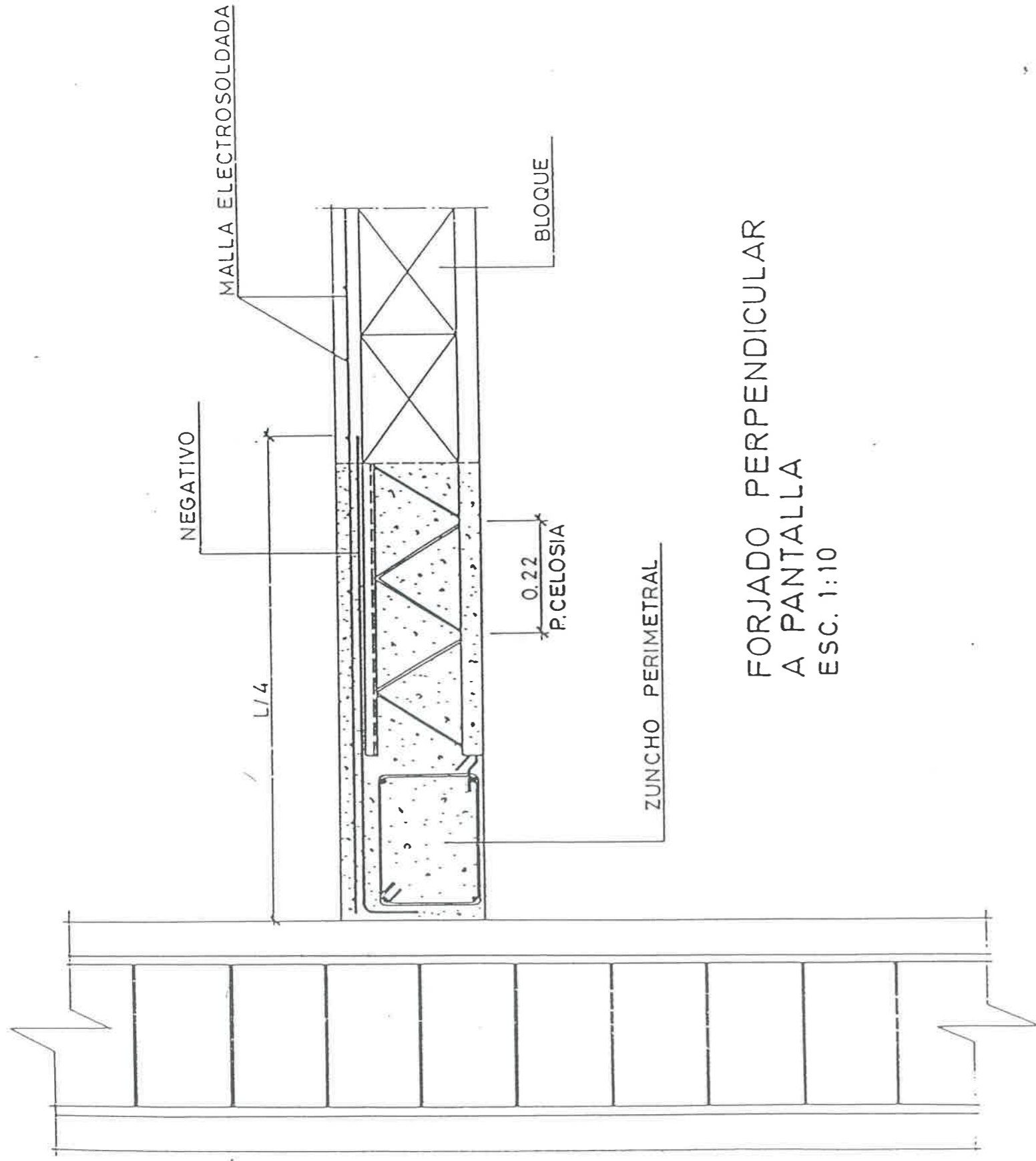




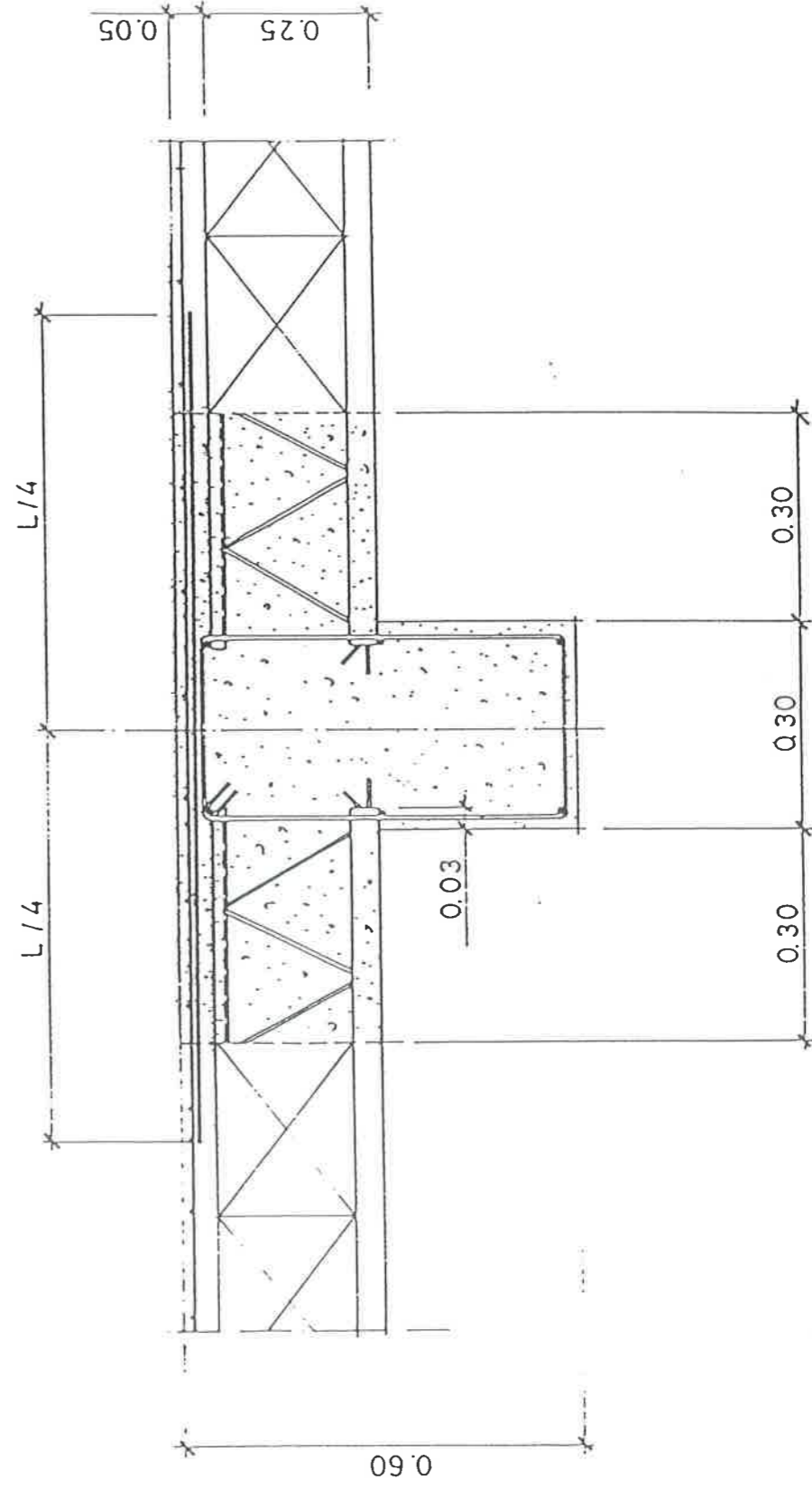
PLANTA  
ESC. 1:10



PLANTA  
ESC. 1:10

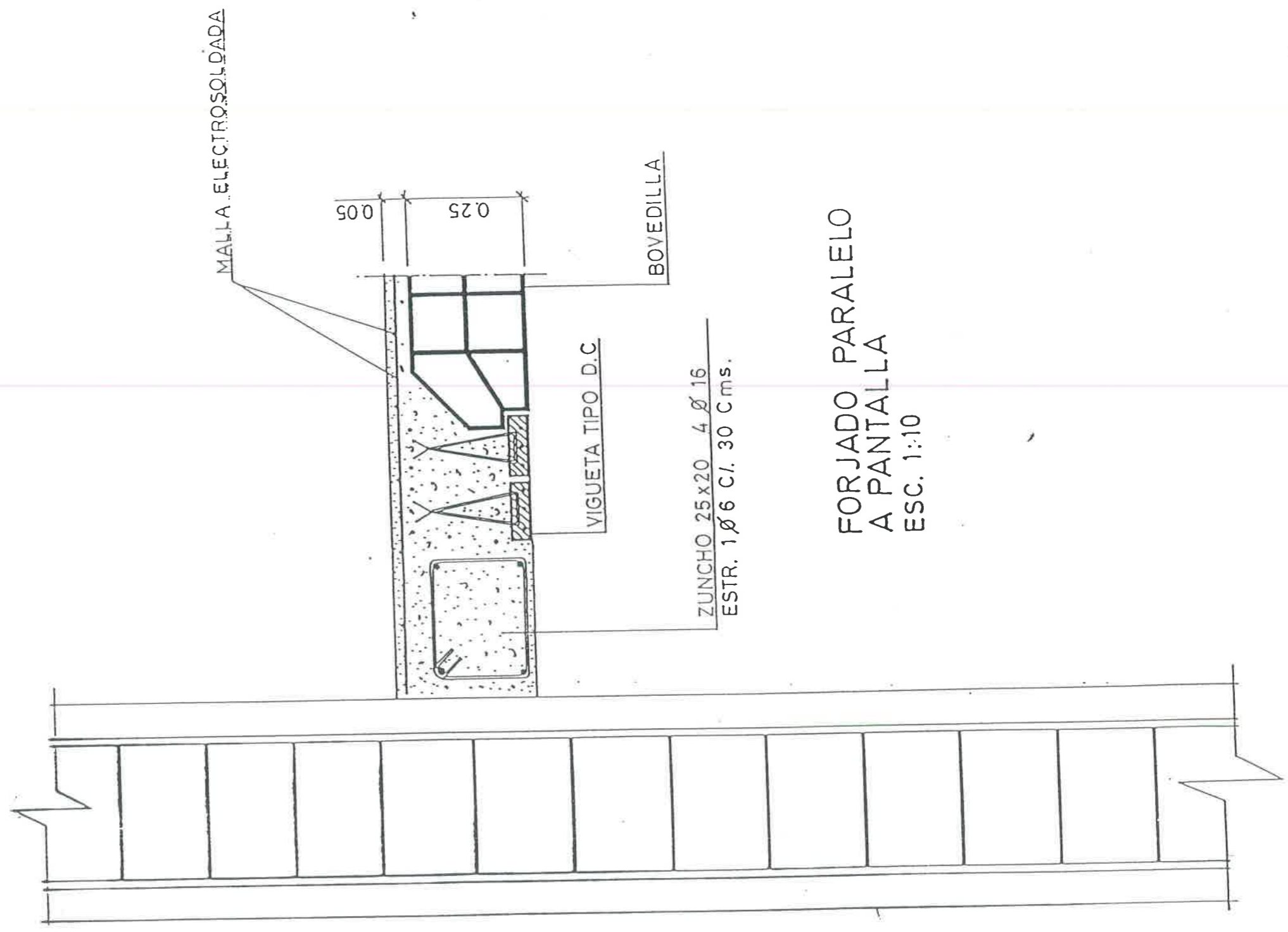


FORJADO PERPENDICULAR  
A PANTALLA  
ESC. 1:10



APOYO DOBLE EN VIGA  
DE HORMIGON  
ESC. 1:10





MALLA ELECTROSOLDADA

0.05

0.25

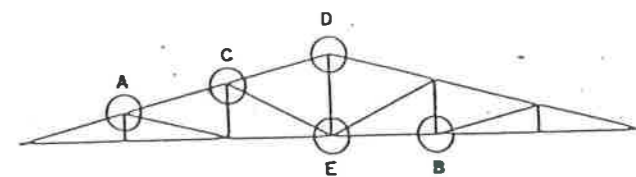
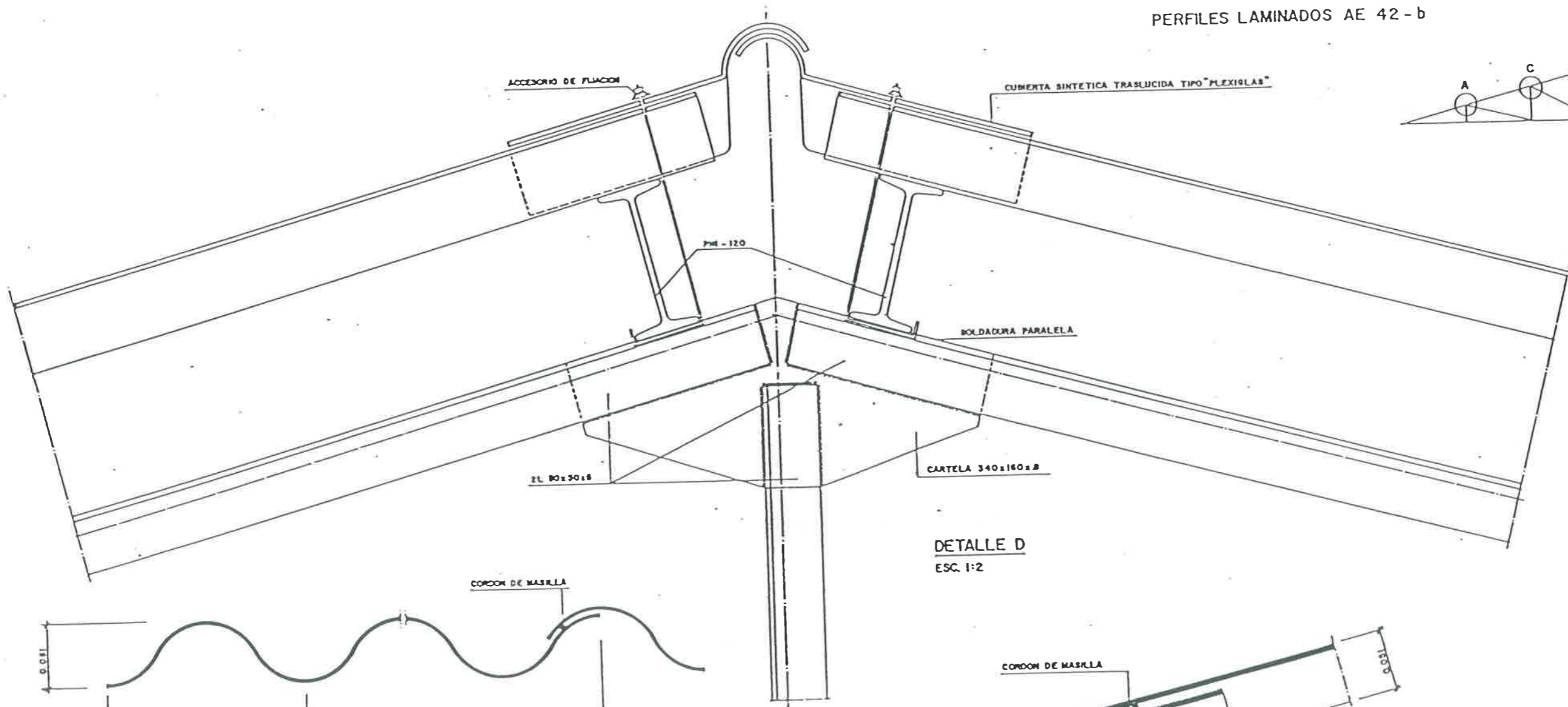
BOVEDILLA

VIGUETA TIPO D.C.

ZUNCHO 25 x 20 4 Ø 16  
ESTR. 1 Ø 6 C/I. 30 Cms.

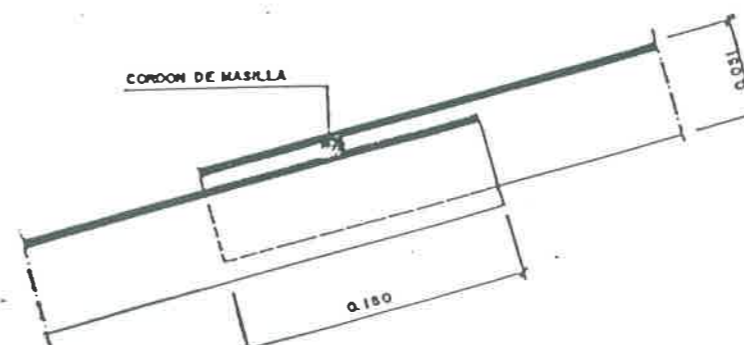
FORJADO PARALELO  
A PANTALLA  
ESC. 1:10

PERFILES LAMINADOS AE 42 - b

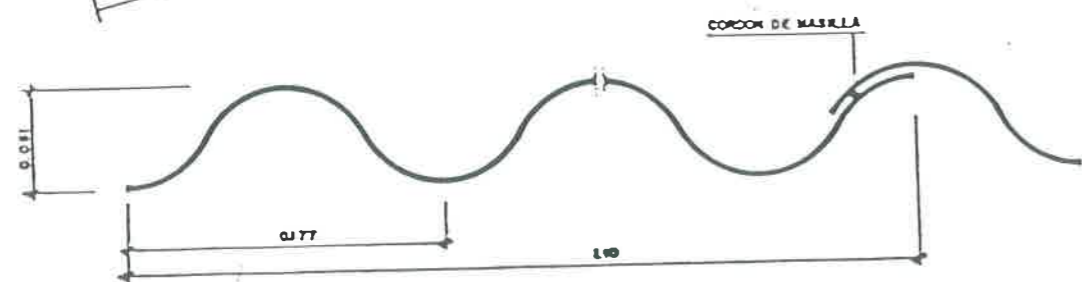


SITUACION DETALLES

DETALLE D  
ESC. 1:2

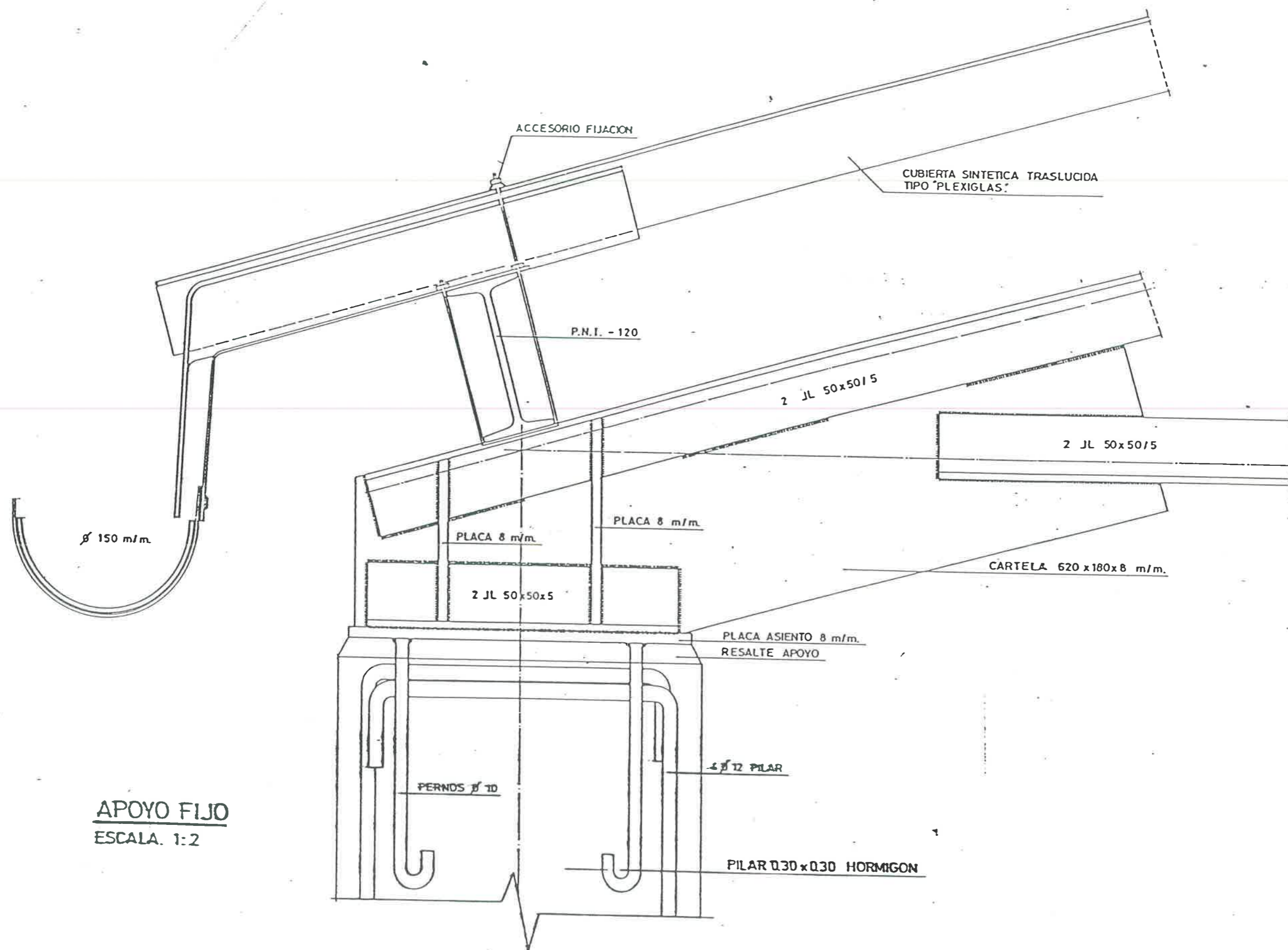


DETALLE SOLAPE  
ESC. 1:2

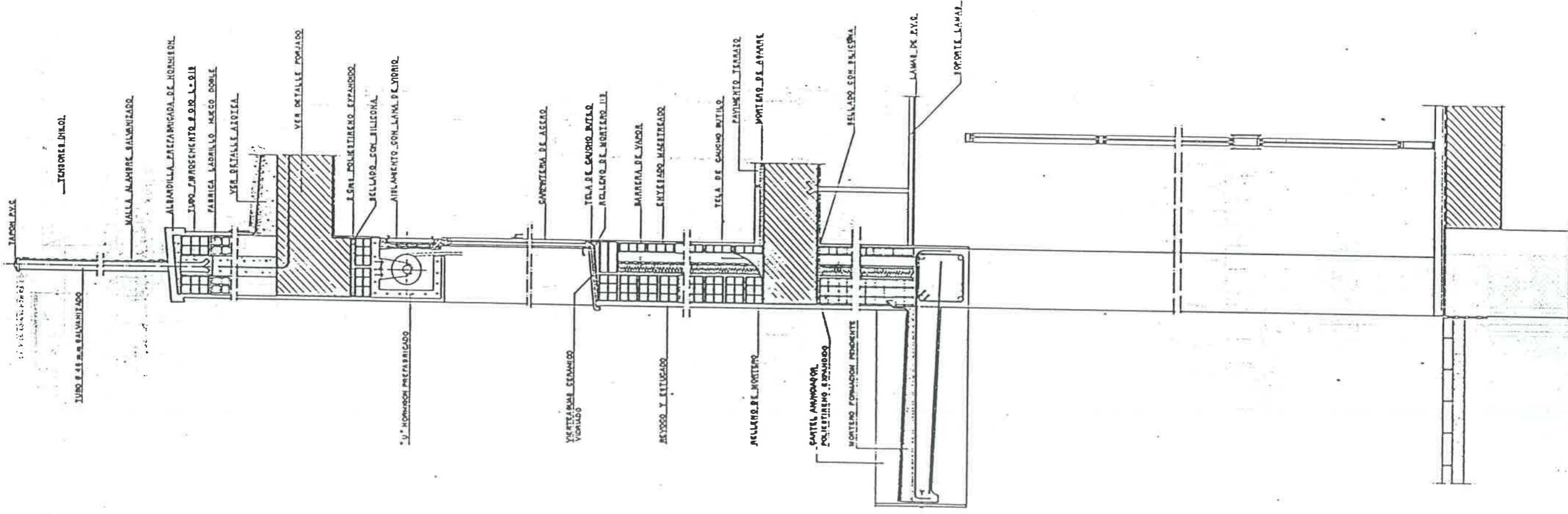


DETALLE PLANCHA SUPERONDA  
ESC. 1:2

PERFILES LAMINADOS  
AE - 42b



**APOYO FIJO**  
ESCALA. 1:2

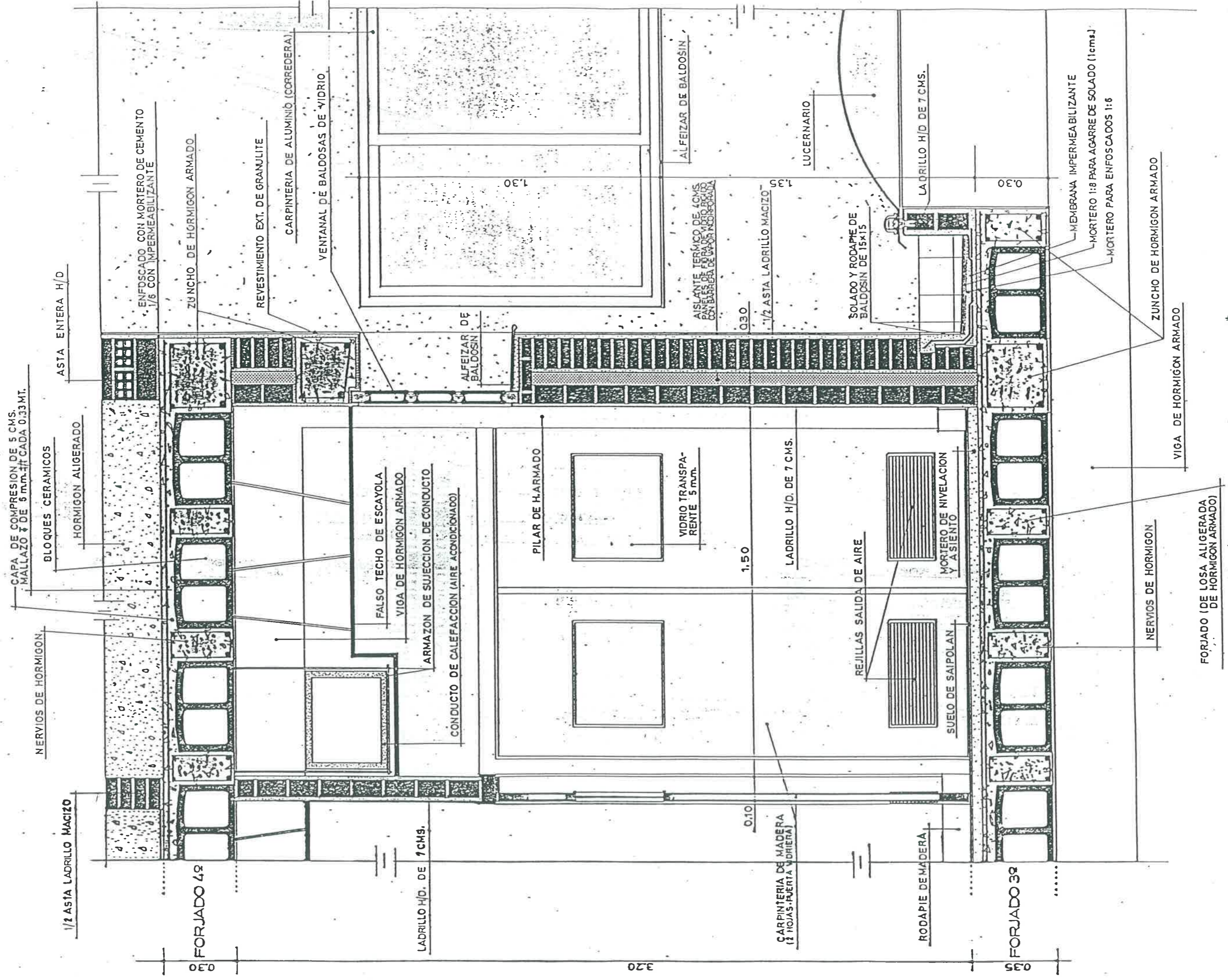


SECCION FACHADA EXTERIOR  
 ESCALA: 1/10

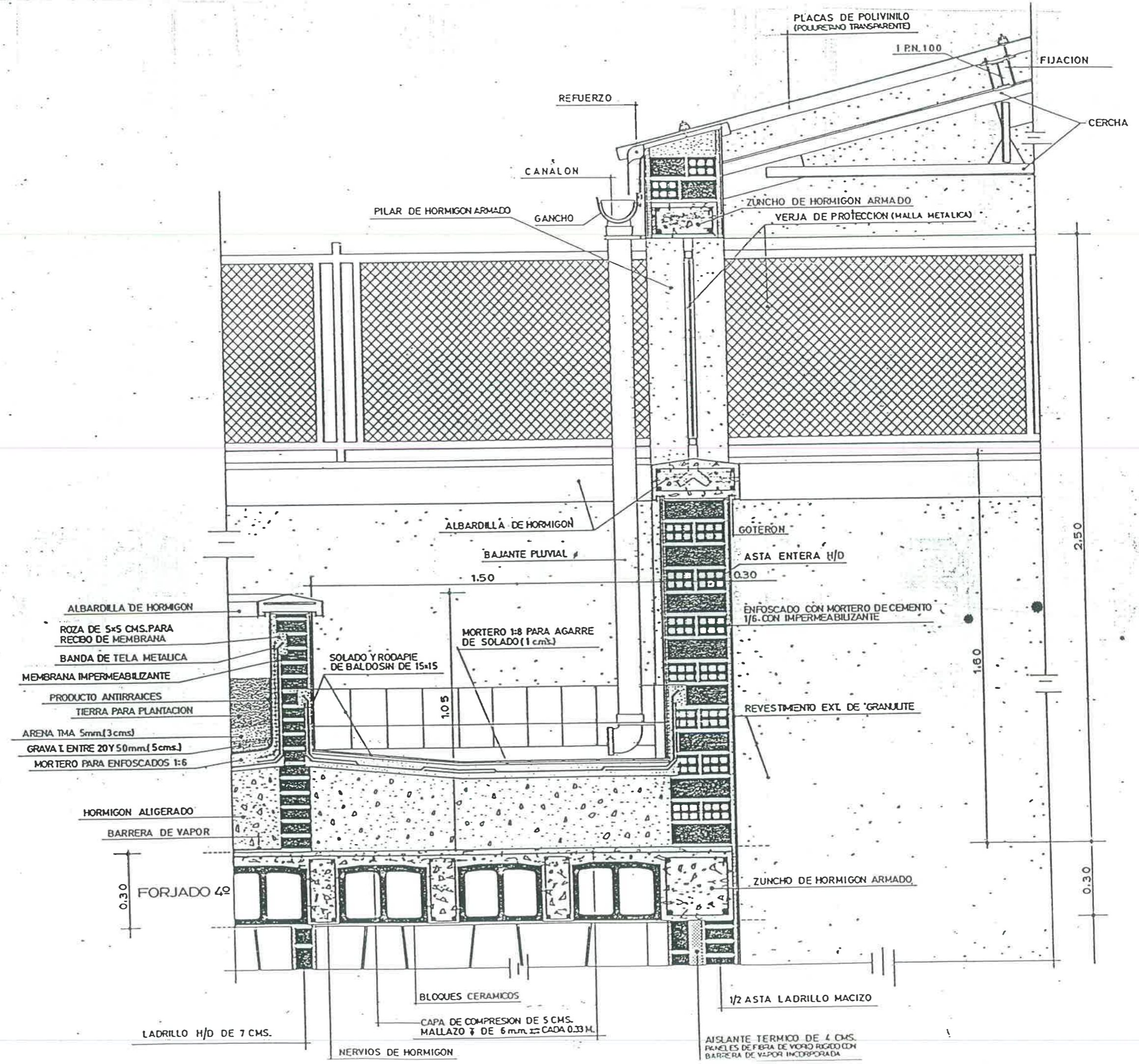












PLACAS DE POLIVINILO (POLIURETANO TRANSPARENTE)

1 PN.100

FIJACION

CERCHA

REFUERZO

CANALON

PILAR DE HORMIGON ARMADO

GANCHO

ZUNCHO DE HORMIGON ARMADO

VERJA DE PROTECCION (MALLA METALICA)

ALBARDILLA DE HORMIGON

BAJANTE PLUVIAL

1.50

GOTERON

ASTA ENTERA H/D

0.30

ENFOSCADO CON MORTERO DE CEMENTO 1/6. CON IMPERMEABILIZANTE

ALBARDILLA DE HORMIGON

ROZA DE 5x5 CMS.PARA RECBO DE MEMBRANA

BANDA DE TELA METALICA

MEMBRANA IMPERMEABILIZANTE

PRODUCTO ANTIRRAICES

TIERRA PARA PLANTACION

ARENA TMA 5mm.(3cms)

GRAVA ENTRE 20Y 50mm.(5cms.)

MORTERO PARA ENFOSCADOS 1:6

SOLADO Y RODAPIE DE BALDOSIN DE 15x15

MORTERO 1:8 PARA AGARRE DE SOLADO (1 cms.)

10.5

REVESTIMIENTO EXL DE GRANULITE

HORMIGON ALIGERADO

BARRERA DE VAPOR

FORJADO 40

ZUNCHO DE HORMIGON ARMADO

BLOQUES CERAMICOS

CAPA DE COMPRESION DE 5 CMS. MALLAZO 7 DE 6 mm. CADA 0.33 M.

1/2 ASTA LADRILLO MACIZO

LADRILLO H/D DE 7 CMS.

NERVIOS DE HORMIGON

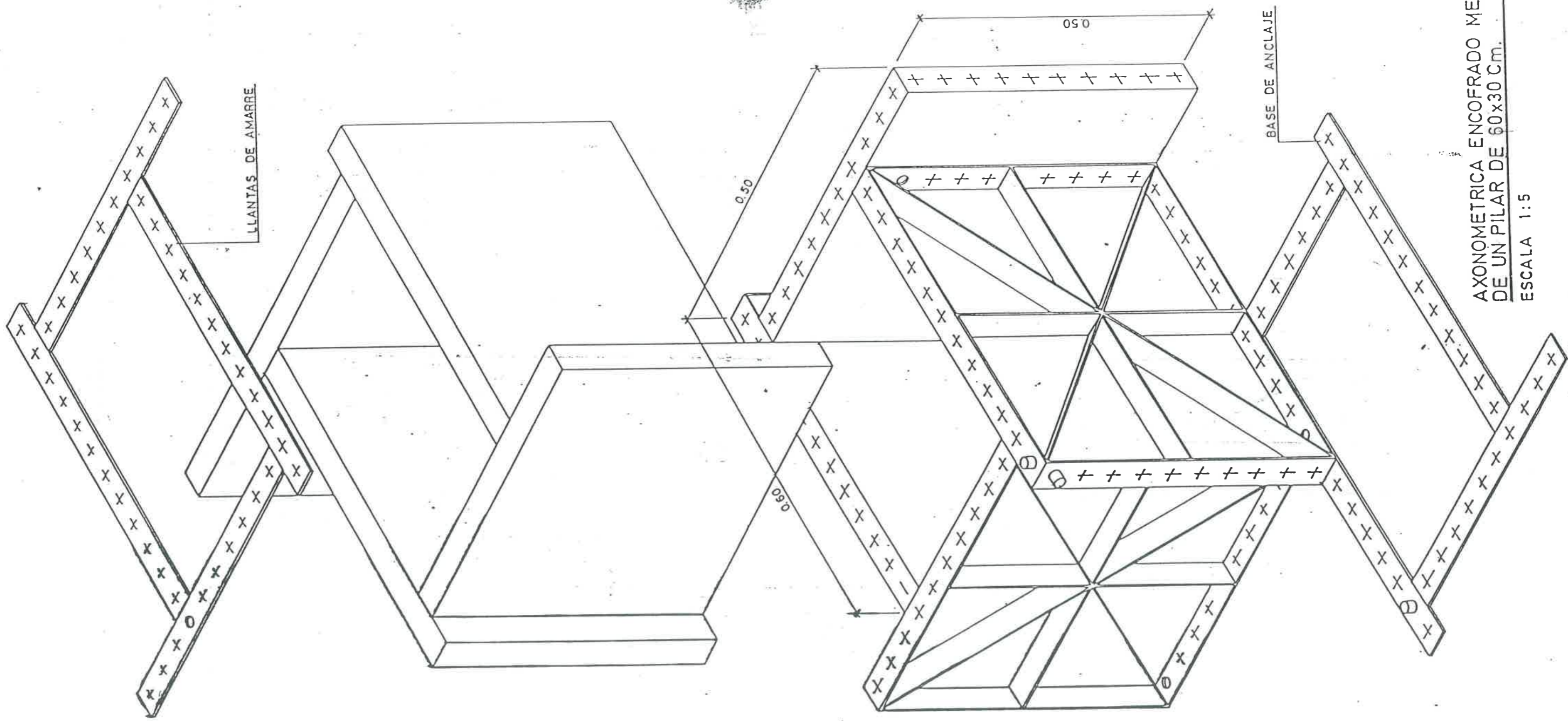
AISLANTE TERMICO DE 4 CMS. PANELES DE FIBRA DE VIDRIO RIGIDO CON BARRERA DE VAPOR INCORPORADA

2.50

1.60

0.30





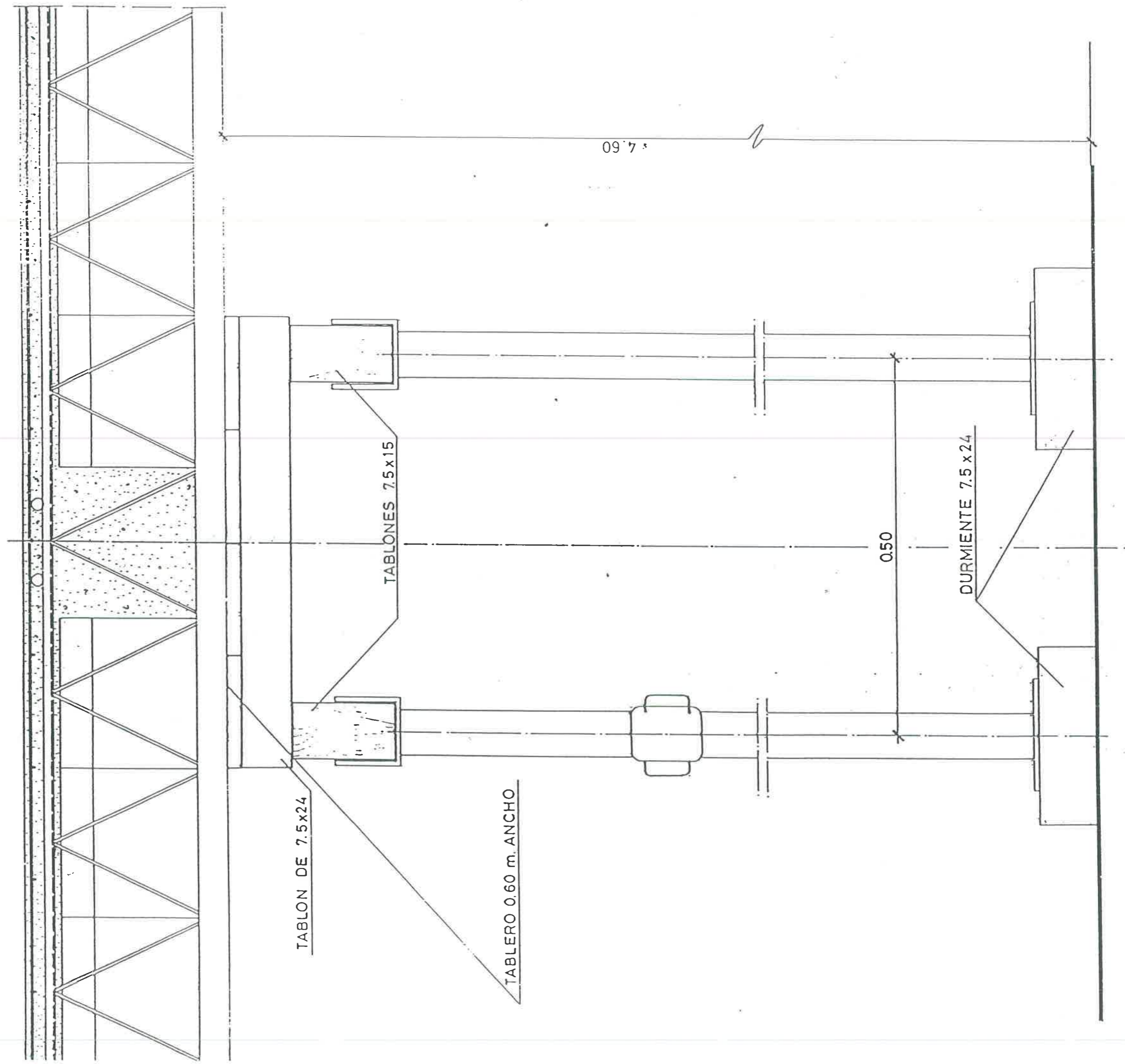
LLANTAS DE AMARRE

BASE DE ANCLAJE

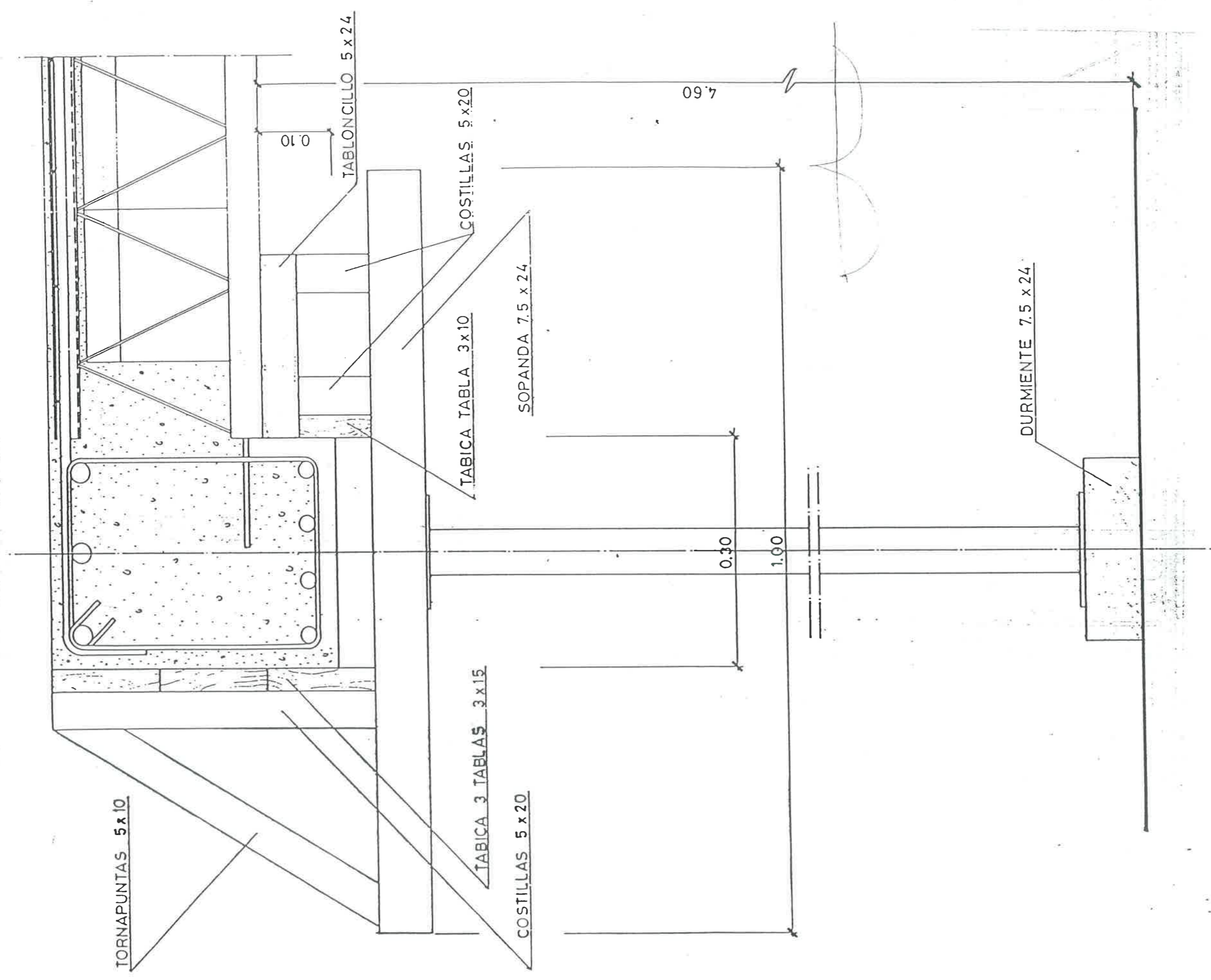
AXONOMETRICA ENCOFRADO METALICO  
DE UN PILAR DE 60x30 Cm.

ESCALA 1:5

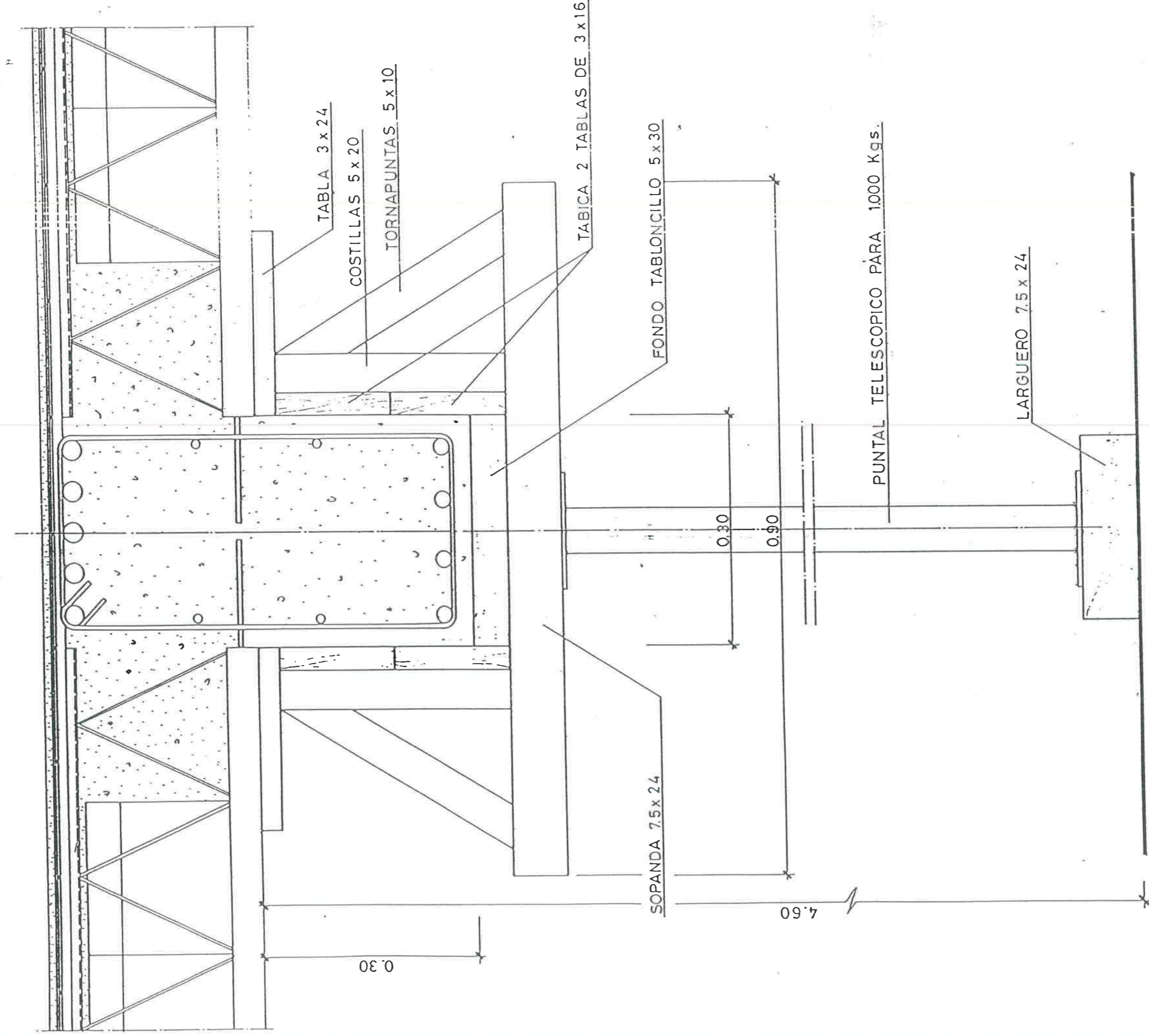




DETALLE ENCOFRADO NERVIOS CENTRALES  
 ESCALA. 1:5



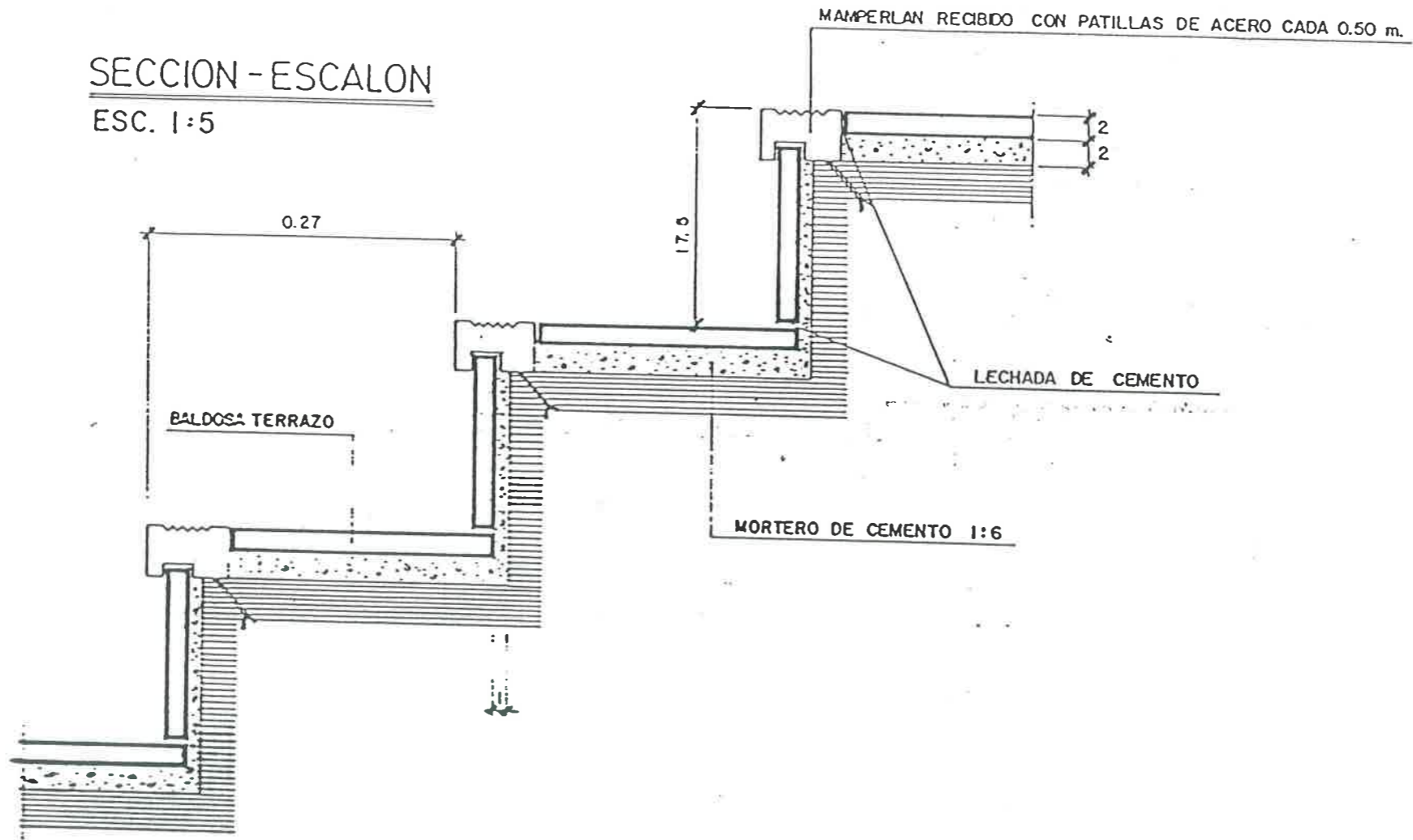
DETALLE ENCOFRADO JACENA LATERAL  
ESCALA. 1:5



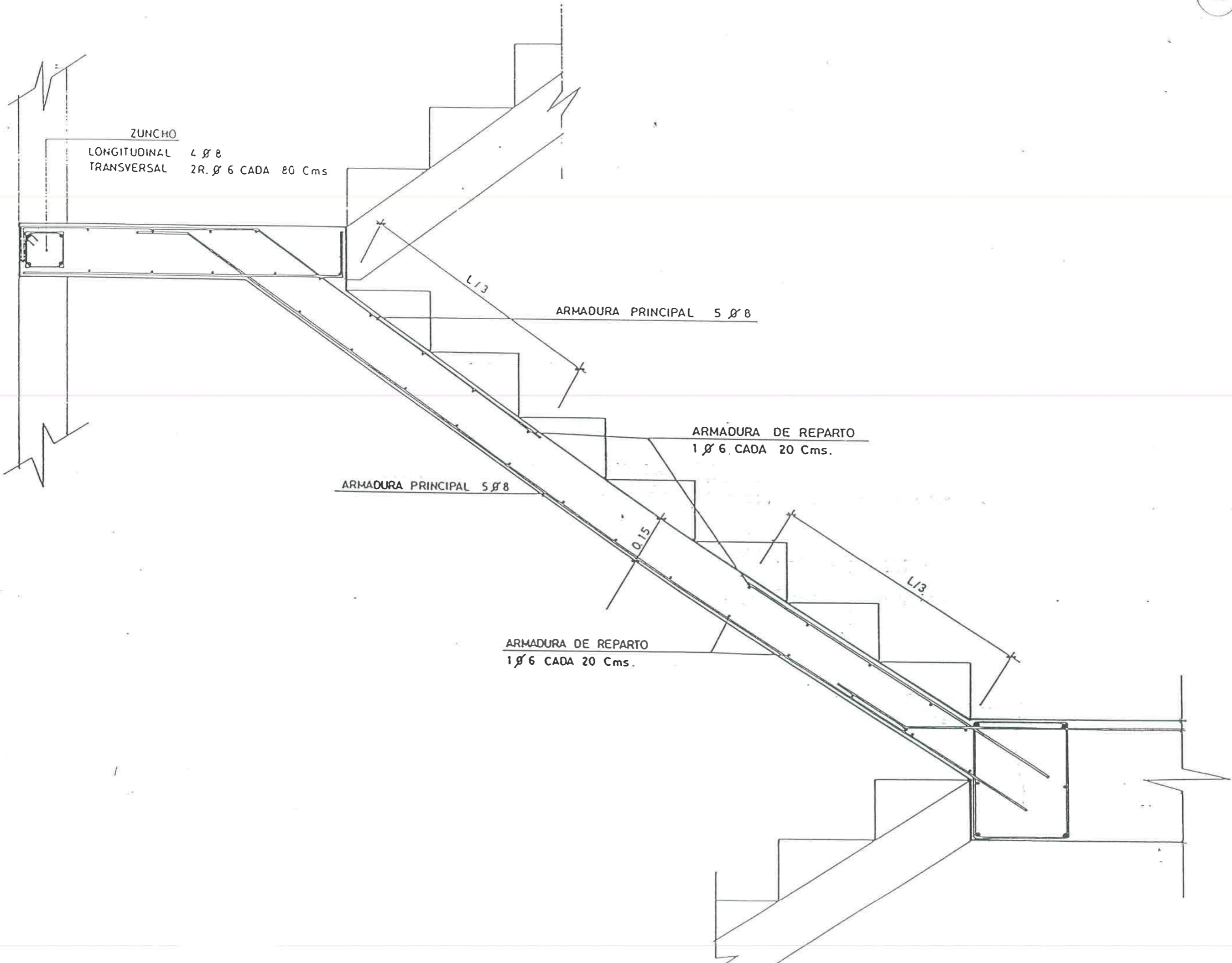
DETALLE ENCOFRADO JACENA CENTRAL  
ESCALA. 1:5

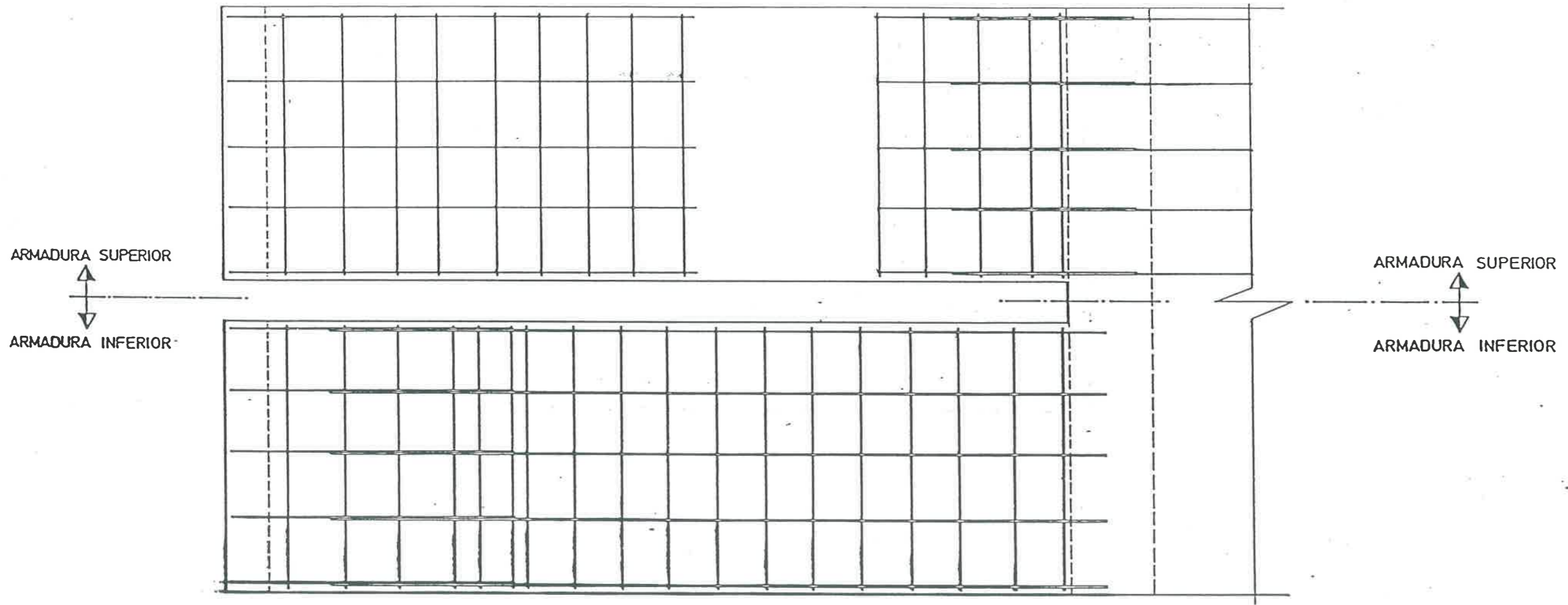


SECCION - ESCALON  
ESC. 1:5

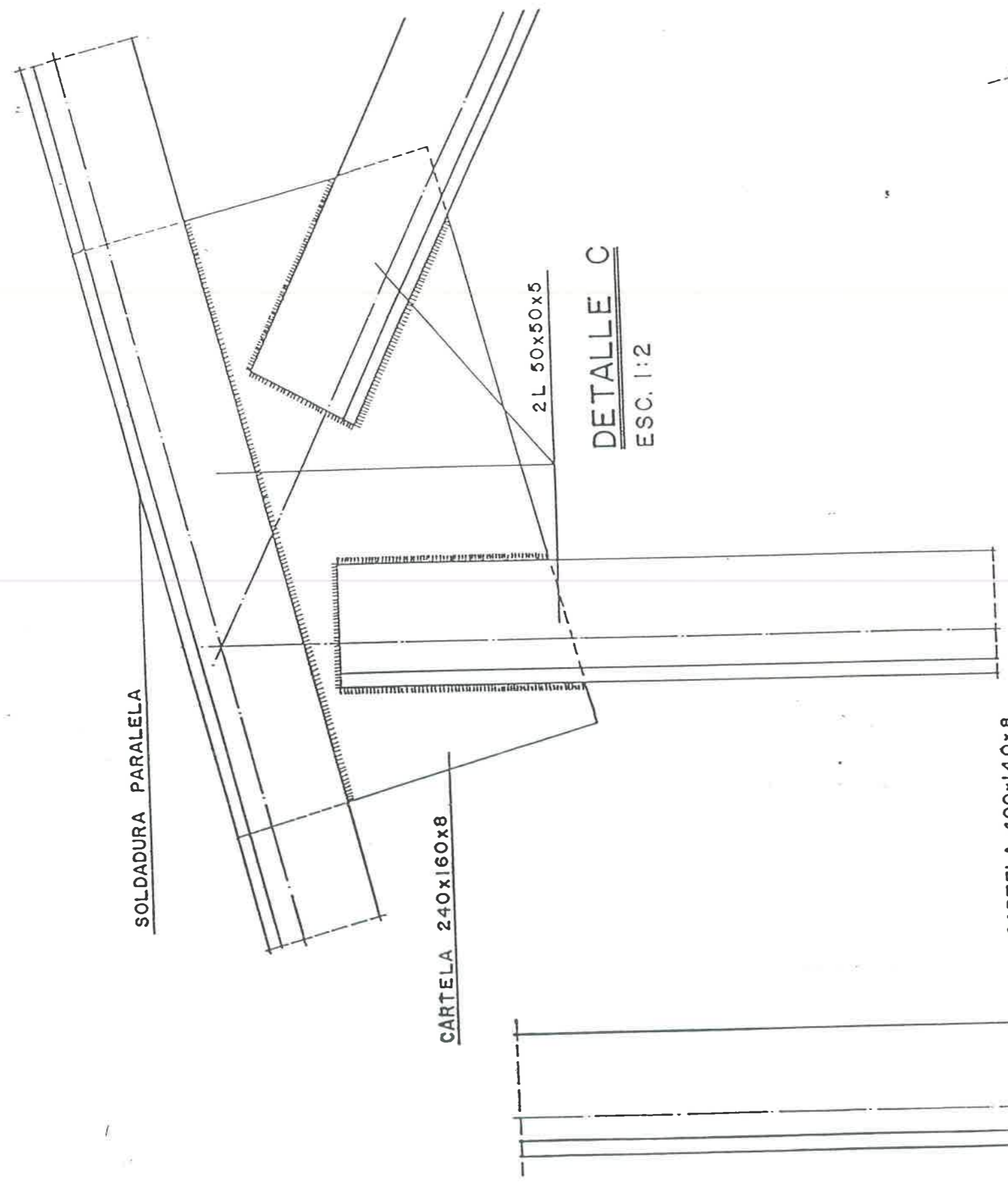








PLANTA ARMADURAS  
ESC. 1:10



SOLDADURA PARALELA

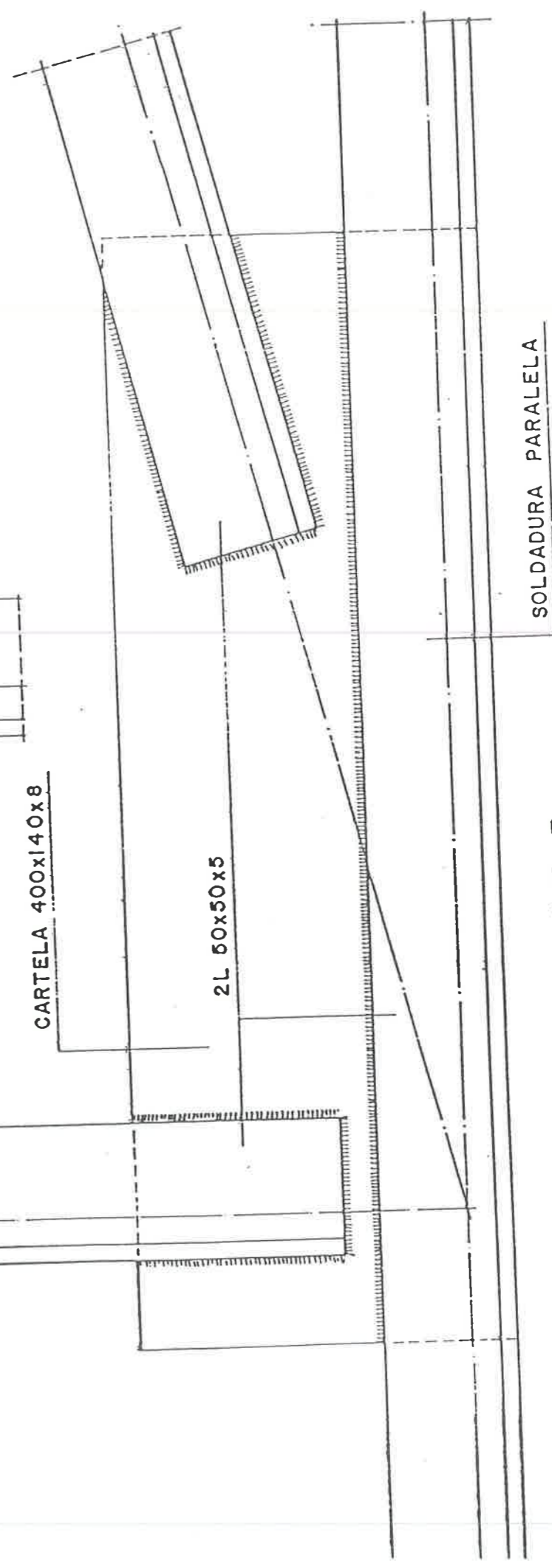
CARTELA 240x160x8

2L 50x50x5

DETALLE C  
ESC. 1:2

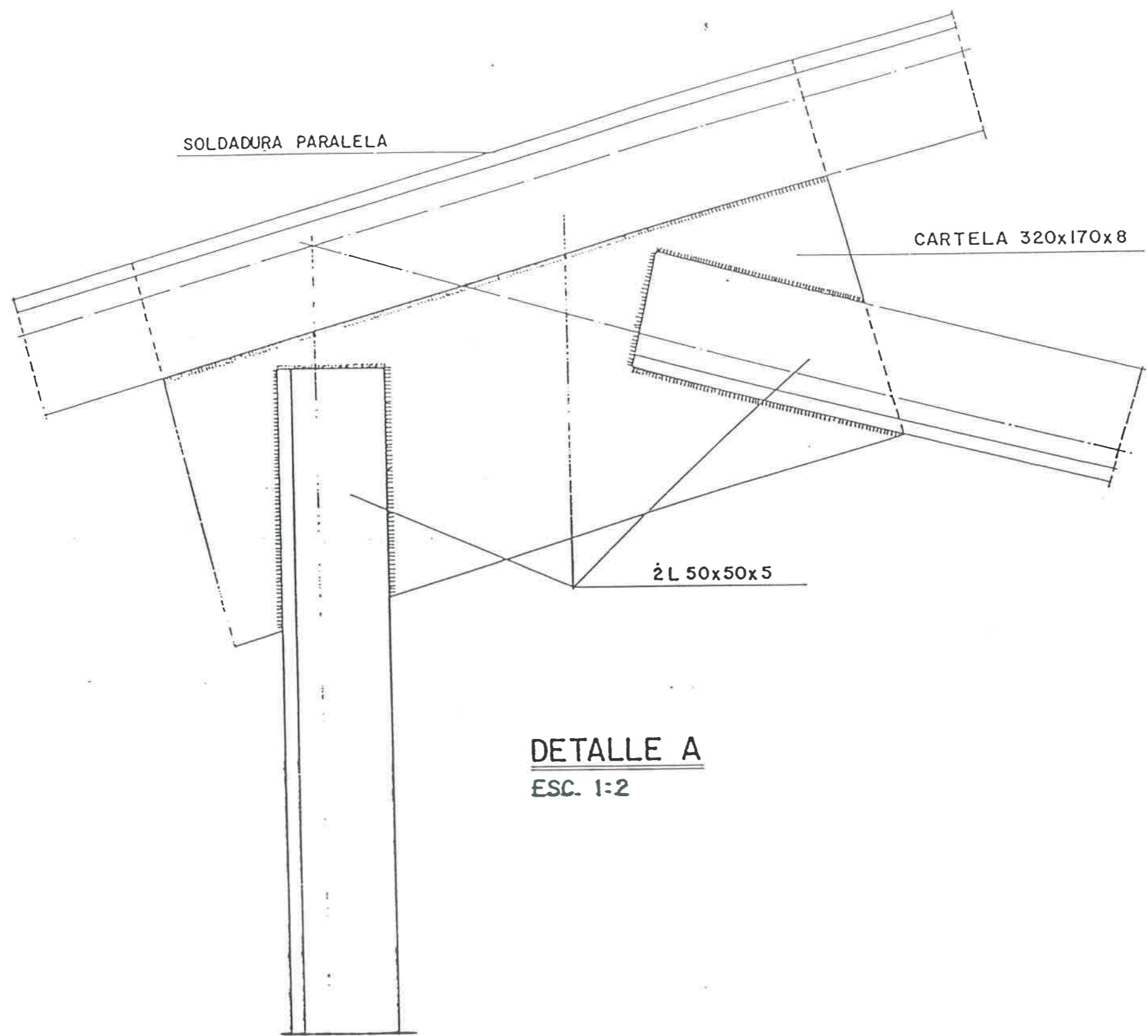
CARTELA 400x140x8

2L 50x50x5



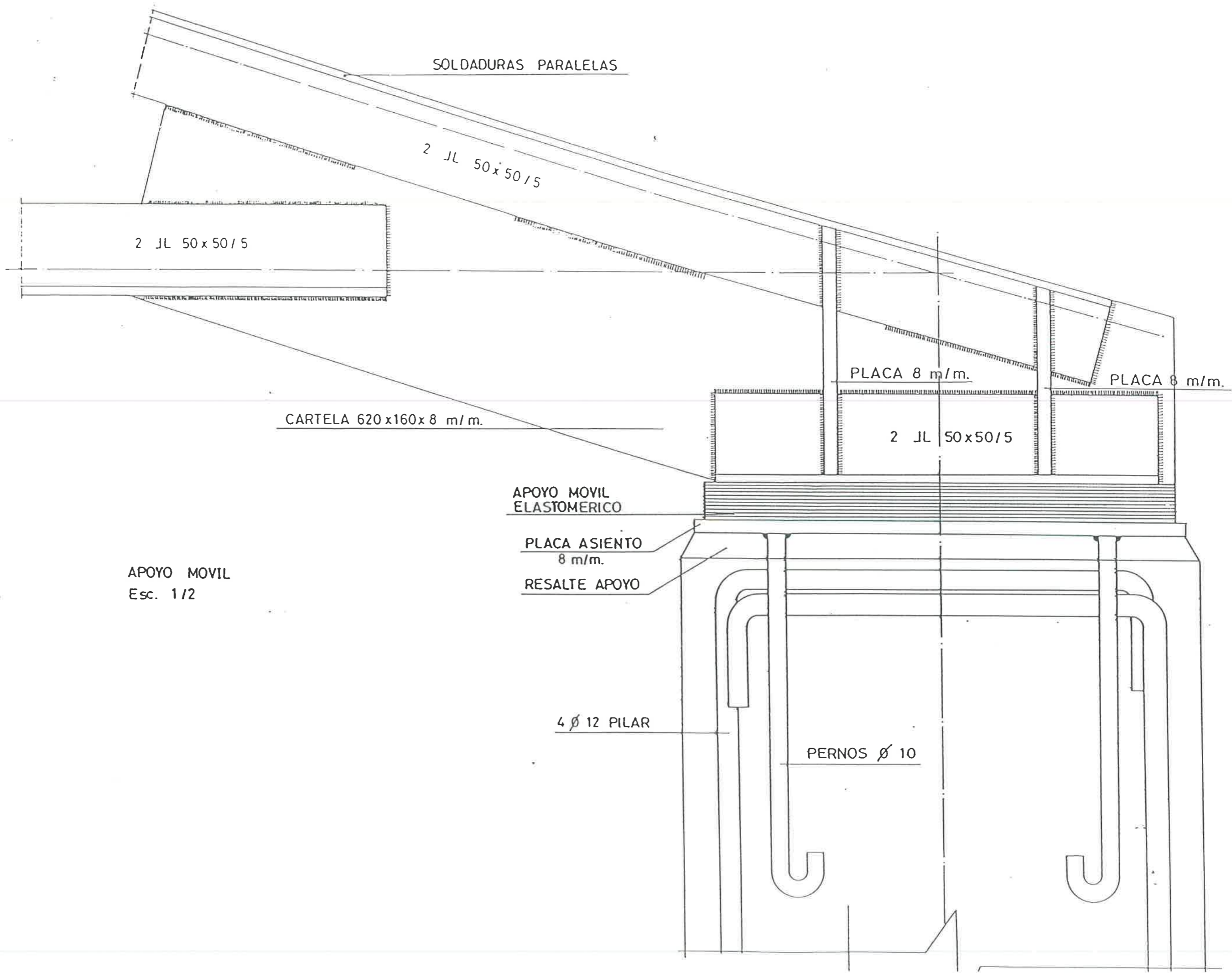
SOLDADURA PARALELA

DETALLE B  
ESC. 1:2

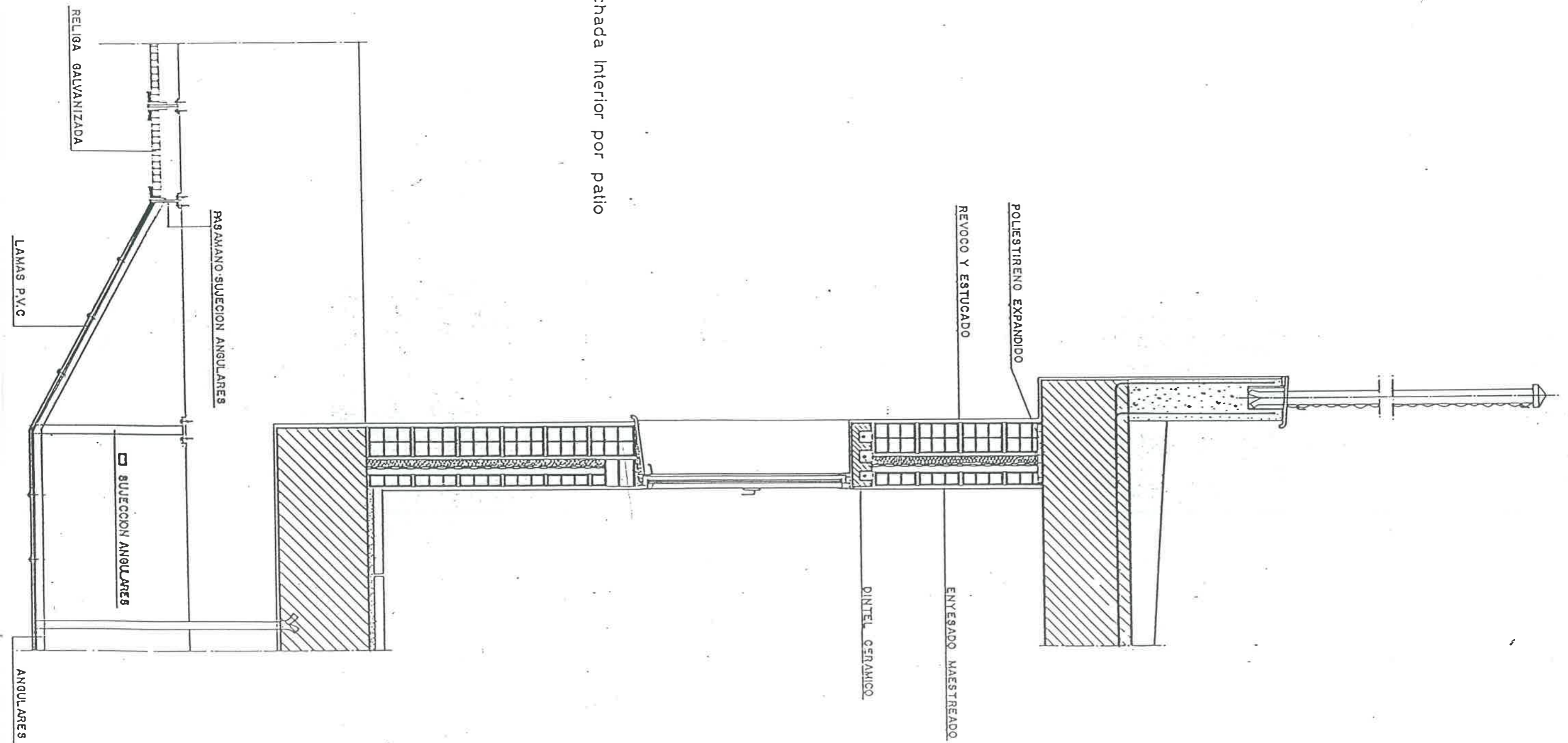


DETALLE A  
ESC. 1:2

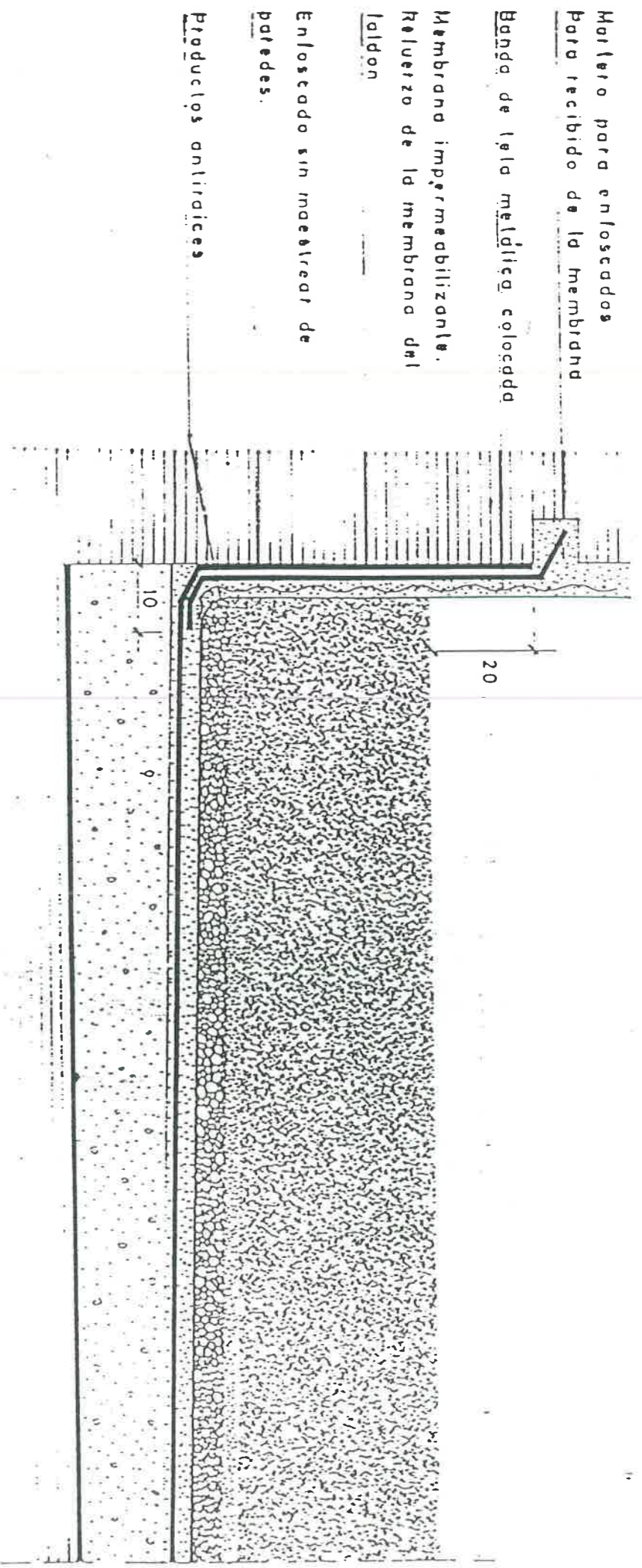




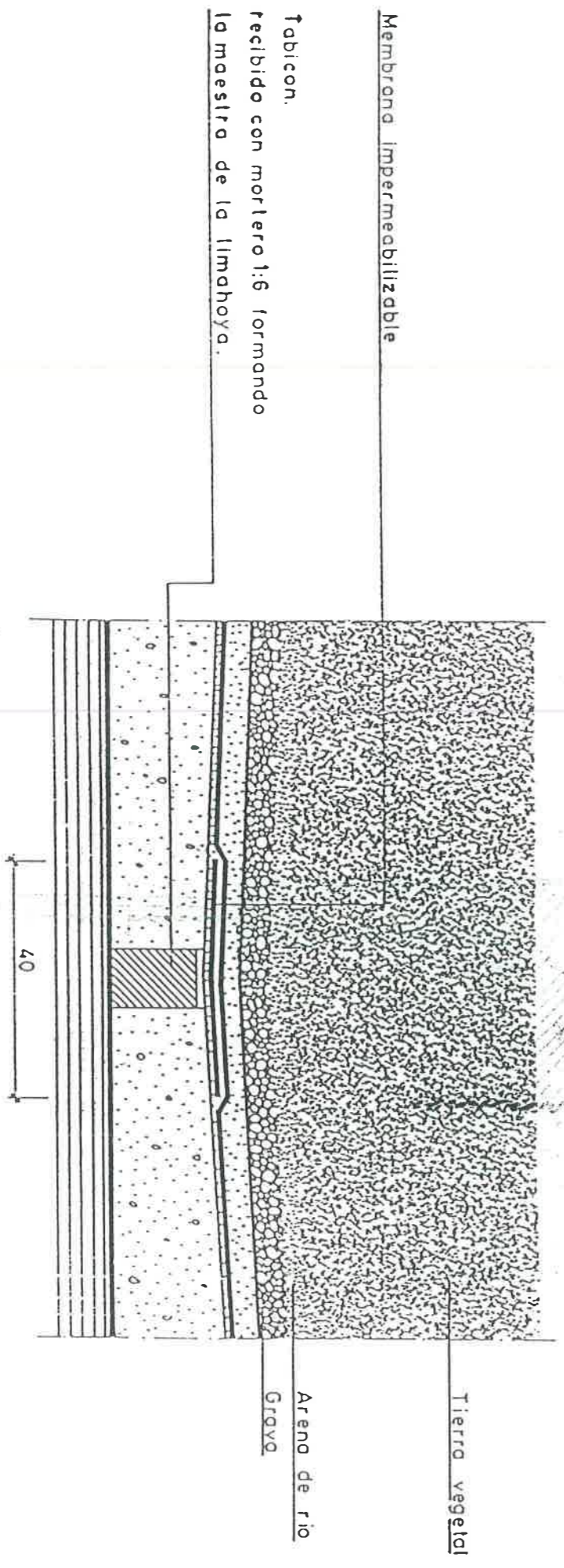
Seccion fachada Interior por patio







ENCUENTRO DE FALDON PARA AJARDINAR CON PARAMENTOS  
 E = 1:10



LIMAHOYA EN FALDON PARA AJARDINAR  
 E = 1:10

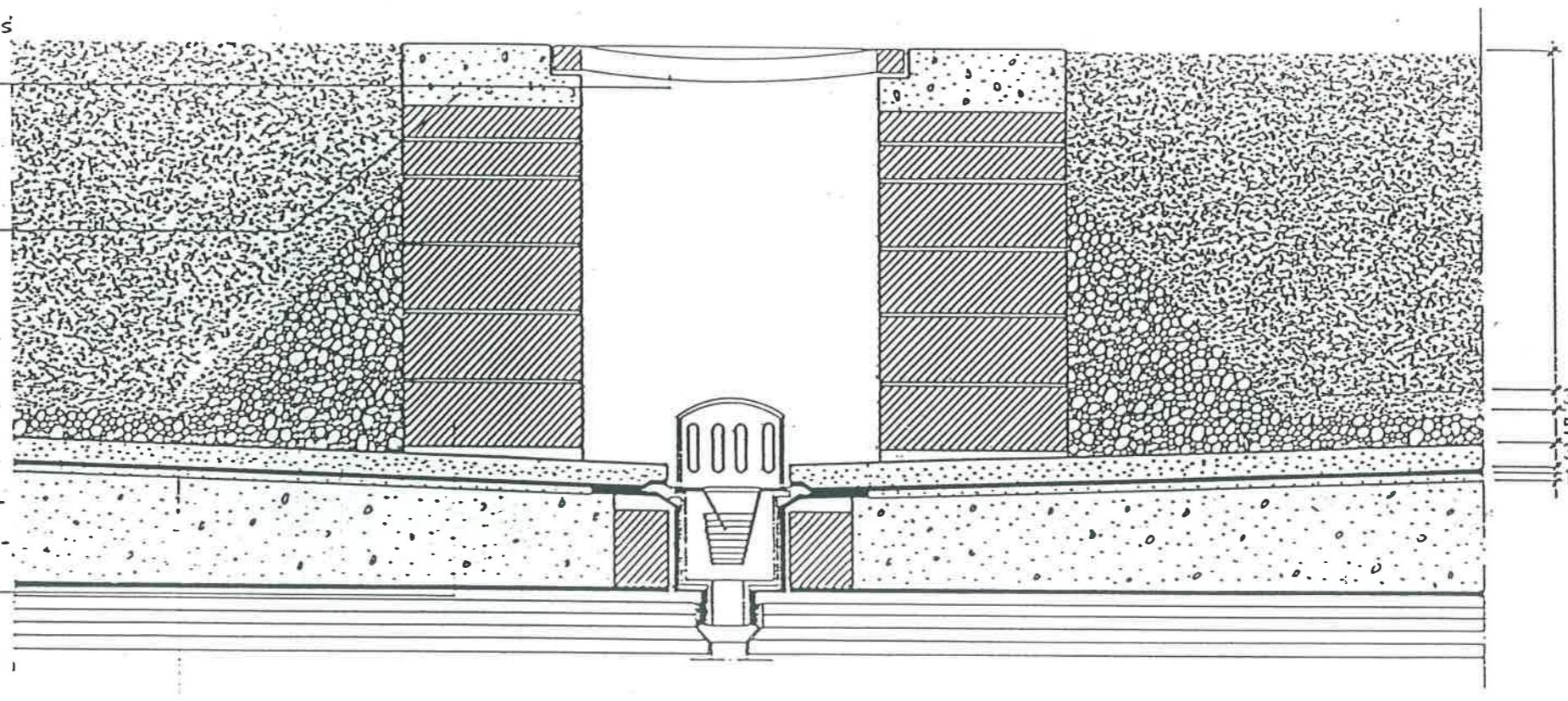


Rejilla de fundición 60x60 cm  
con cerco de perfil laminado  
de 50x5 mm y patillas  
de anclaje

Hormigón en masa de  
resistencia caracteris-  
tica 100 kg/cm<sup>2</sup>

Muro aparejado  
de ladrillo hueco do-  
ble colocado a tizón  
recibido con mortero  
de cemento 1,6 y re-  
matado con dos hile-  
ras de ladrillos mazi-  
zo o perforado

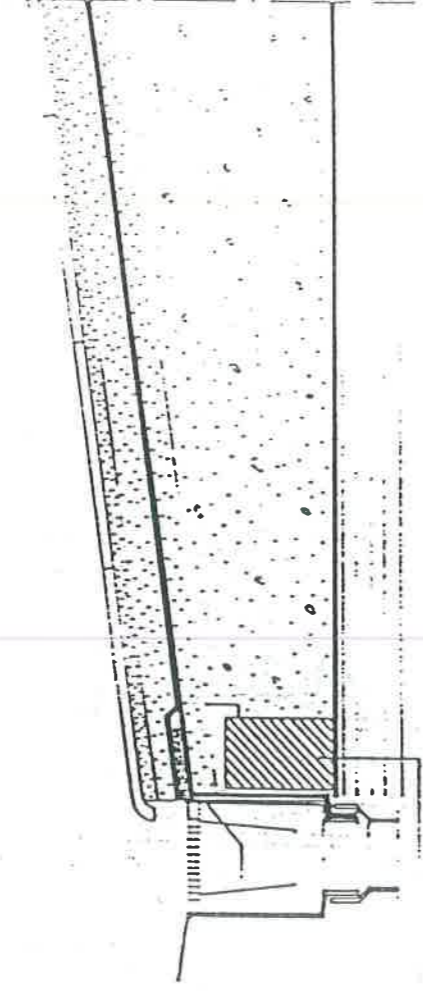
Membrana impermeabi-  
lizante



ENCUENTRO DE FALDON PARA AJARDINAR CON SUMIDERO

E=1:10

La parte inferior de la membrana llegará hasta la bajante penetrando en ella.  
 Una vez recibida la cazoleta se ejecutará el resto de la membrana con un solape de 10 cm.

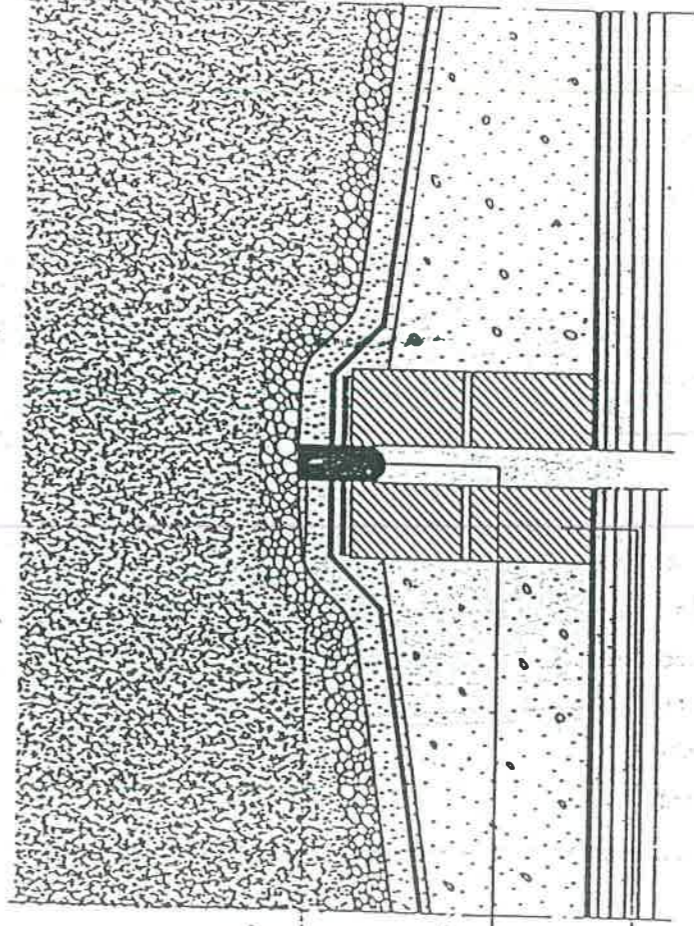


Caja para recibir la cazoleta formada por labique de ladrillo hueco sellado con mortero 1:6

### ENCUENTRO CON CAZOLETA

E=1:5

Mastico para relleno de juntas de dilatacion.  
 Se aplicará una vez ejecutada la capa de mortero de protección, rellenando el canal de plomo hasta enrasar con ella.



Plancha de plomo.  
 Colocada sobre cama de asfalto, solapada 10 cm a cada lado

Doble labicón recibido con mortero de cemento 1:6

### JUNTA DE DILATACION EN FALDON PARA A JARDINAR

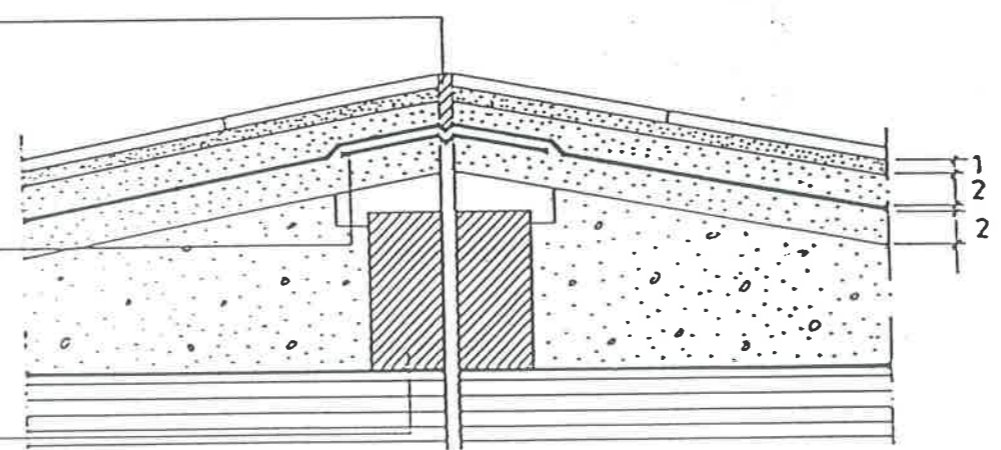
E = 1:10



Mastico

Plancha de plomo. Los solapes de 10cm deberán estar protegidos con una impregnación asfáltica.

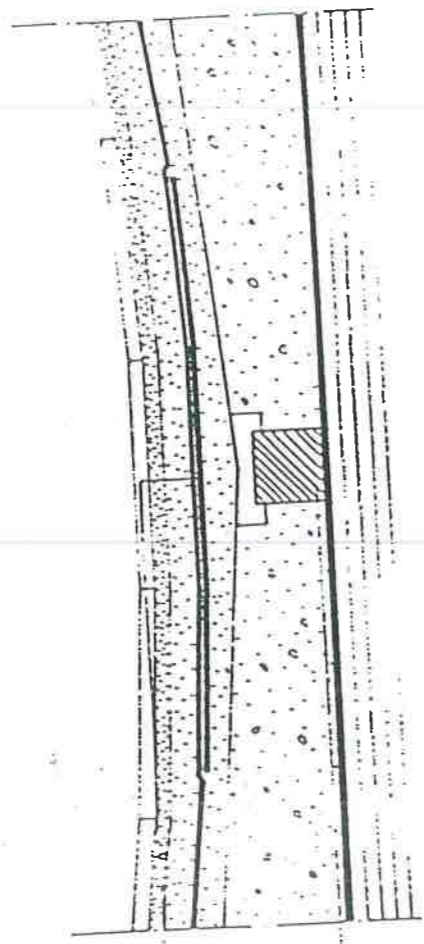
Maestra formada por ladrillo hueco doble, recibido con mortero 1:6



JUNTA DE DILATACION

E= 1:5



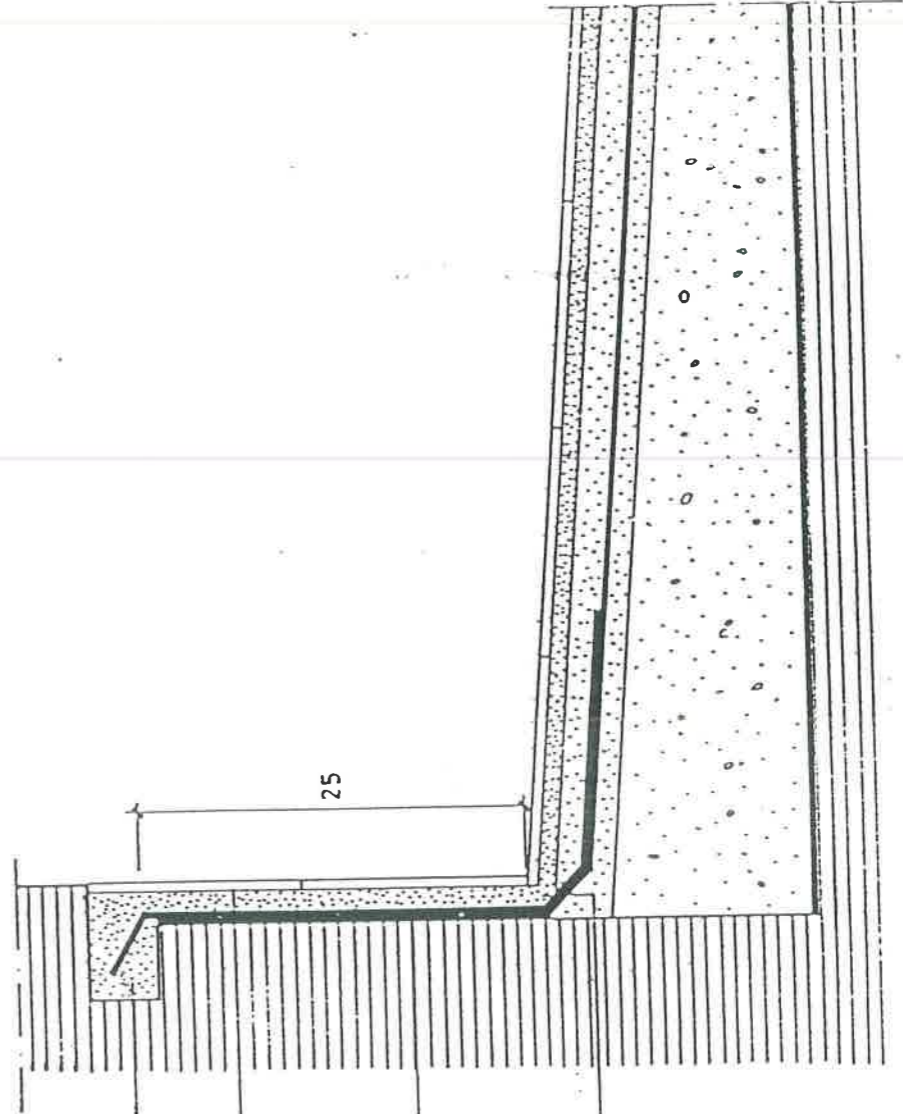


Reforzo de membrana

Maestra formada por ladrillo hueco doble recibido con mortero 1:6

LIMAHOYA

E=1:5



Rosa de 5x5 cm para recibido de la membrana

Rodapié de baldosín

Membrana impermeabilizante. Solapado 25 cm sobre el elemento vertical.

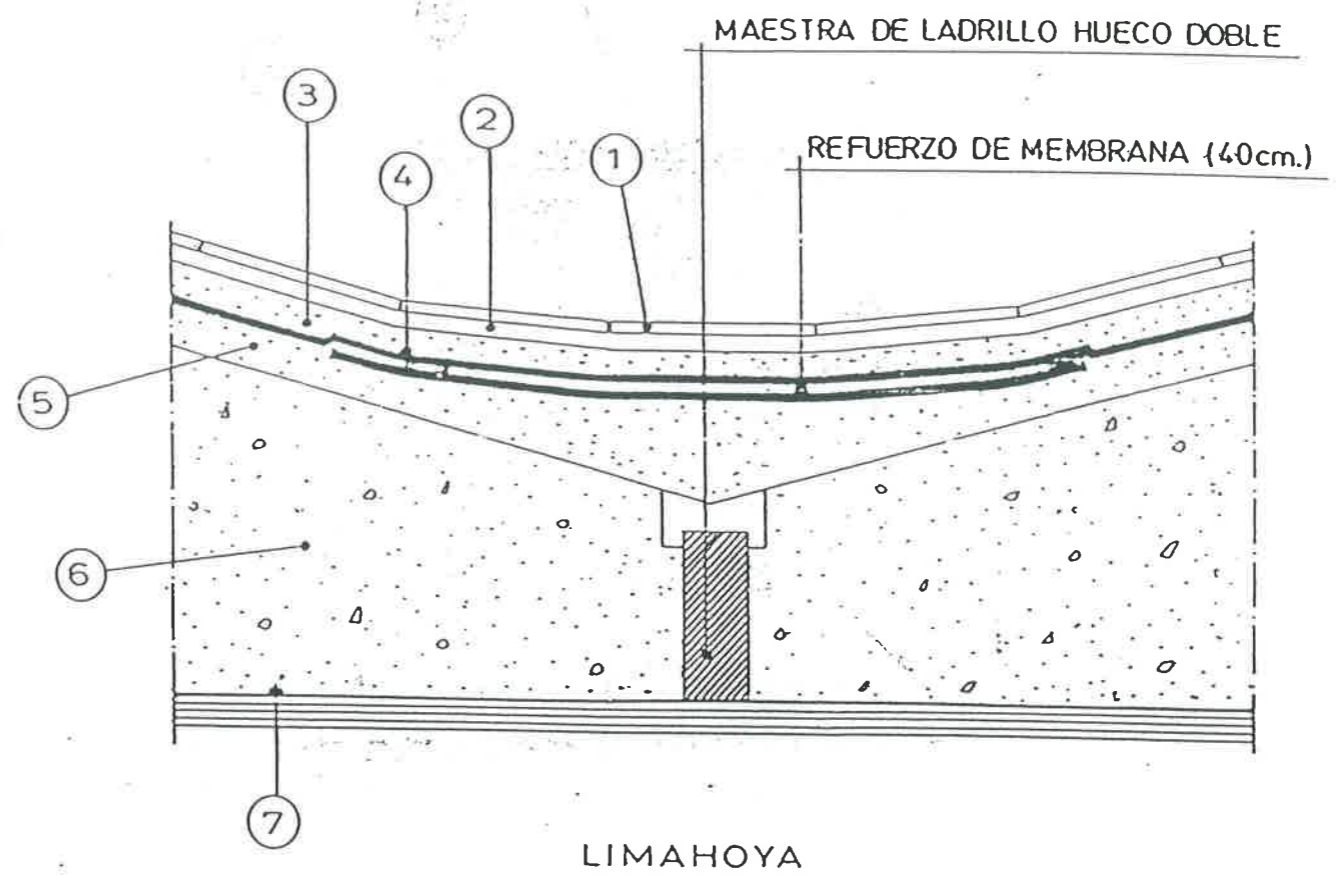
Mortero de cemento y arena 1:8 de 1 cm de espesor para recibido de rodapiés.

ENCUENTRO DE FALDON DE HORMIGON ALIGERADO CON PARAMENTO

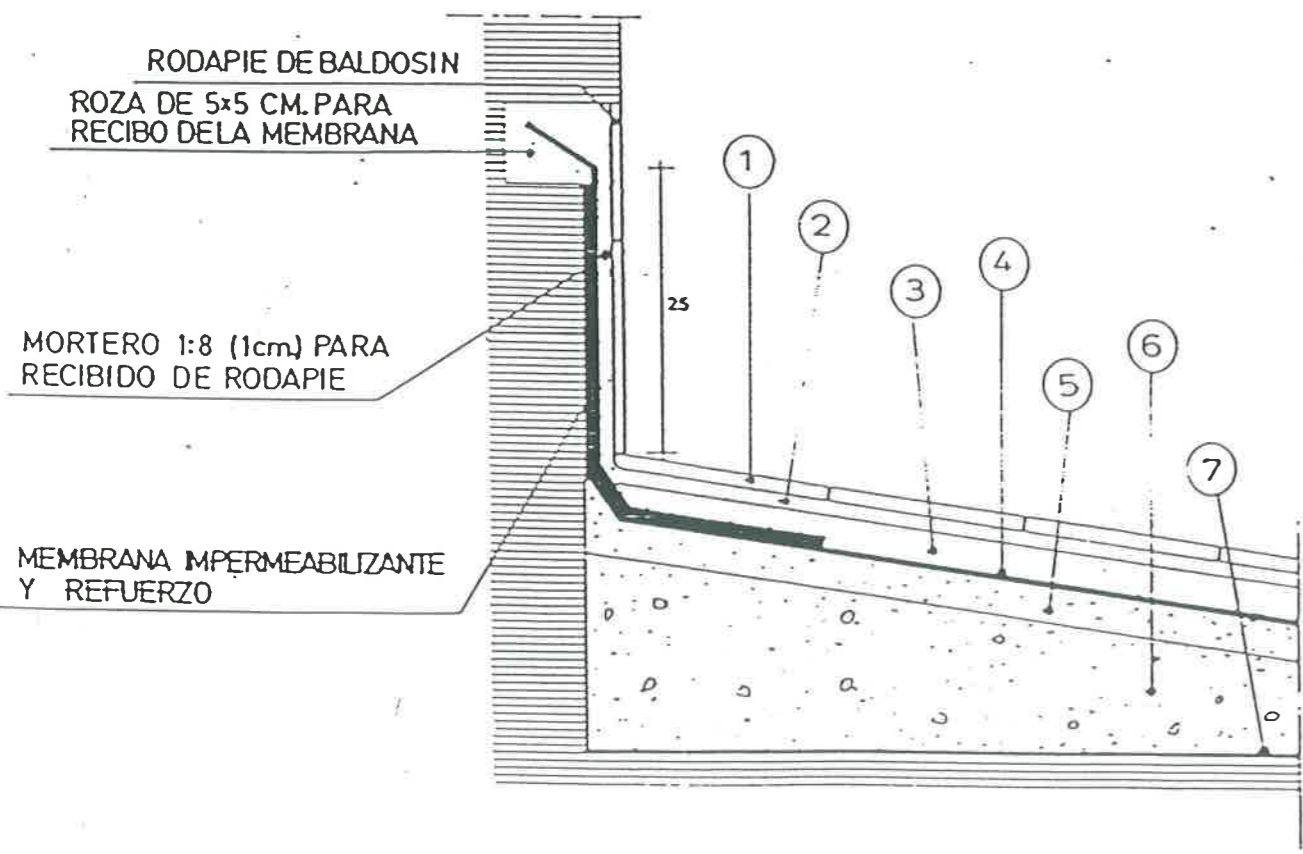
E=1:5

LEYENDA AZOTEAS TRANSITABLES

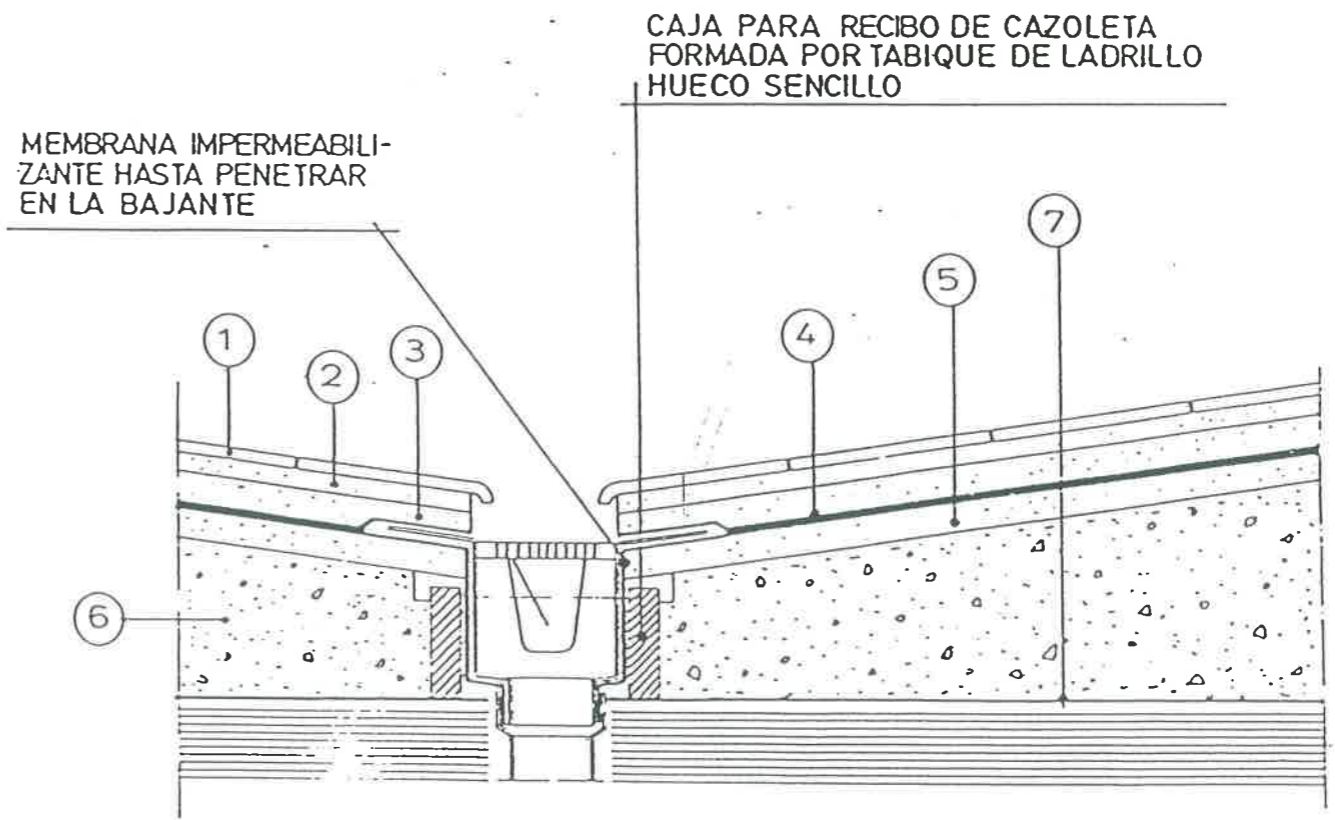
- ① SOLADO DE BALDOSIN
- ② MORTERO 1/8 PARA AGARRE DE SOLADO (1 cm.)
- ③ MORTERO 1/6 SOBRE MEMBRANA (2 cm.)
- ④ MEMBRANA IMPERMEABILIZANTE
- ⑤ MORTERO 1/6 - ARISTAS REDONDEADAS (2 cm.)
- ⑥ HORMIGON ALIGERADO
- ⑦ BARRERA DE VAPOR - OXIASFALTO 1.5 Kg./m<sup>2</sup>



LIMAHOYA

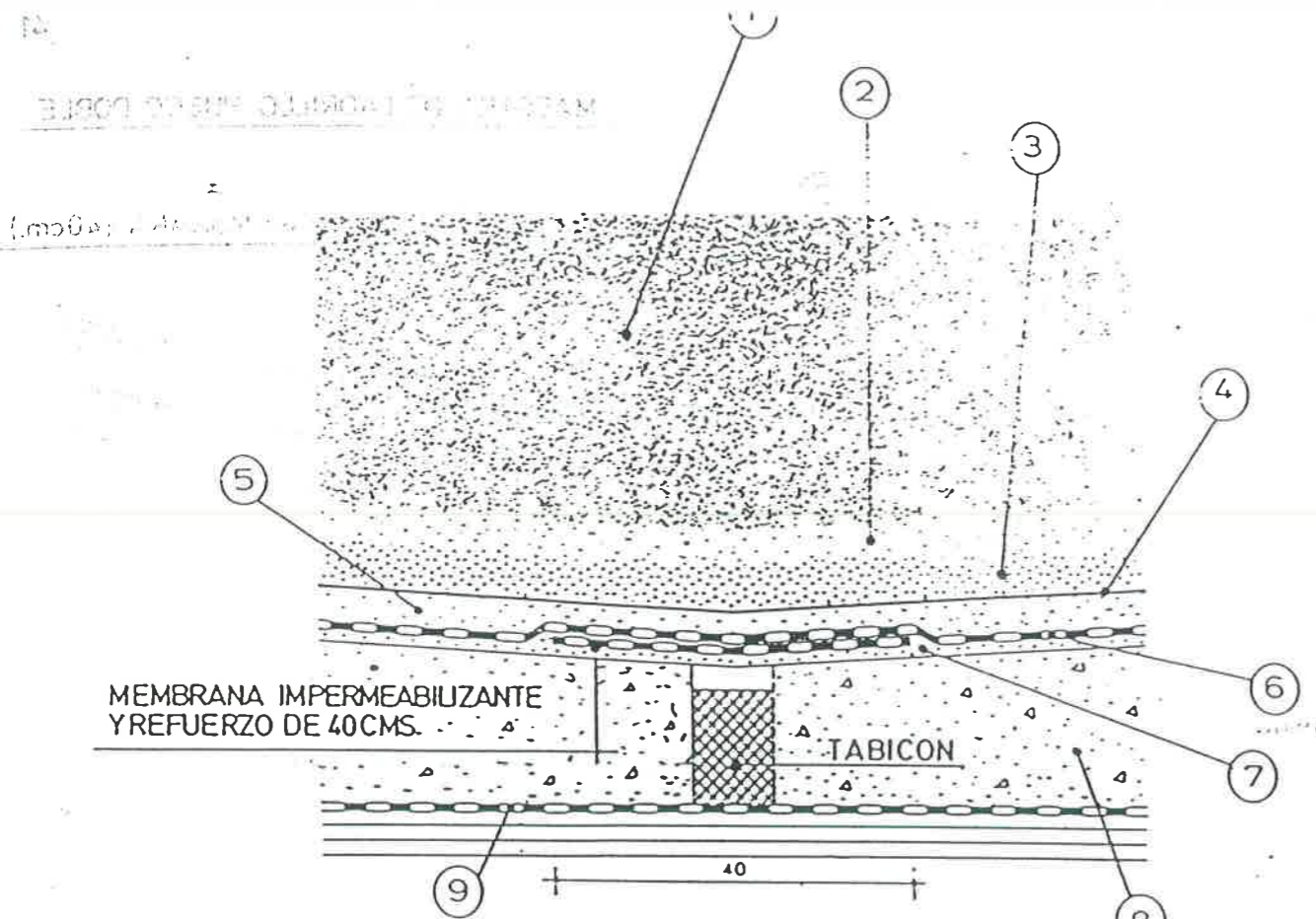


ENCUENTRO DE FALDON DE HORMIGON ALIGERADO CON PARAMENTOS

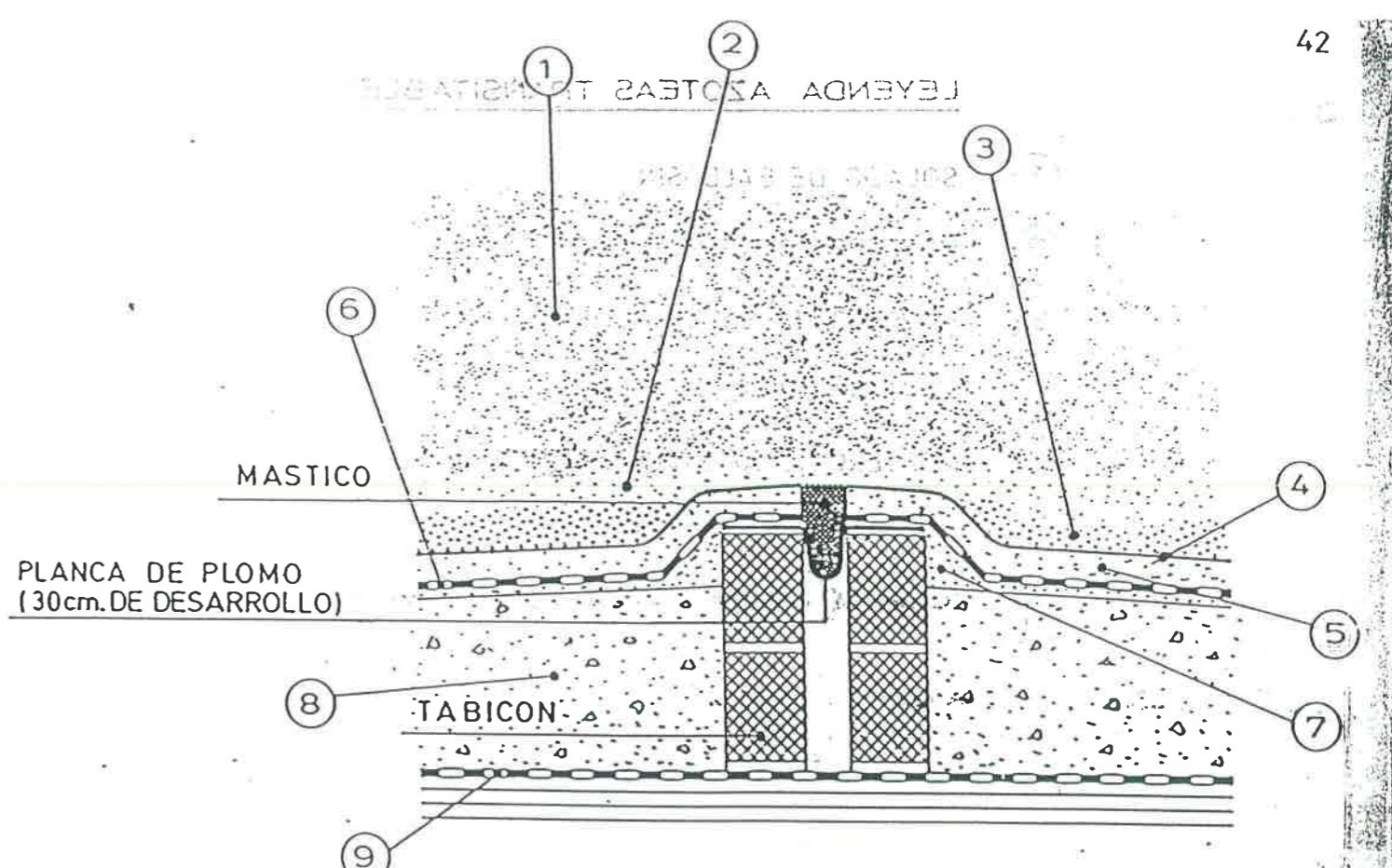


ENCUENTRO DE DOS FALDONES CON CAZOLETA

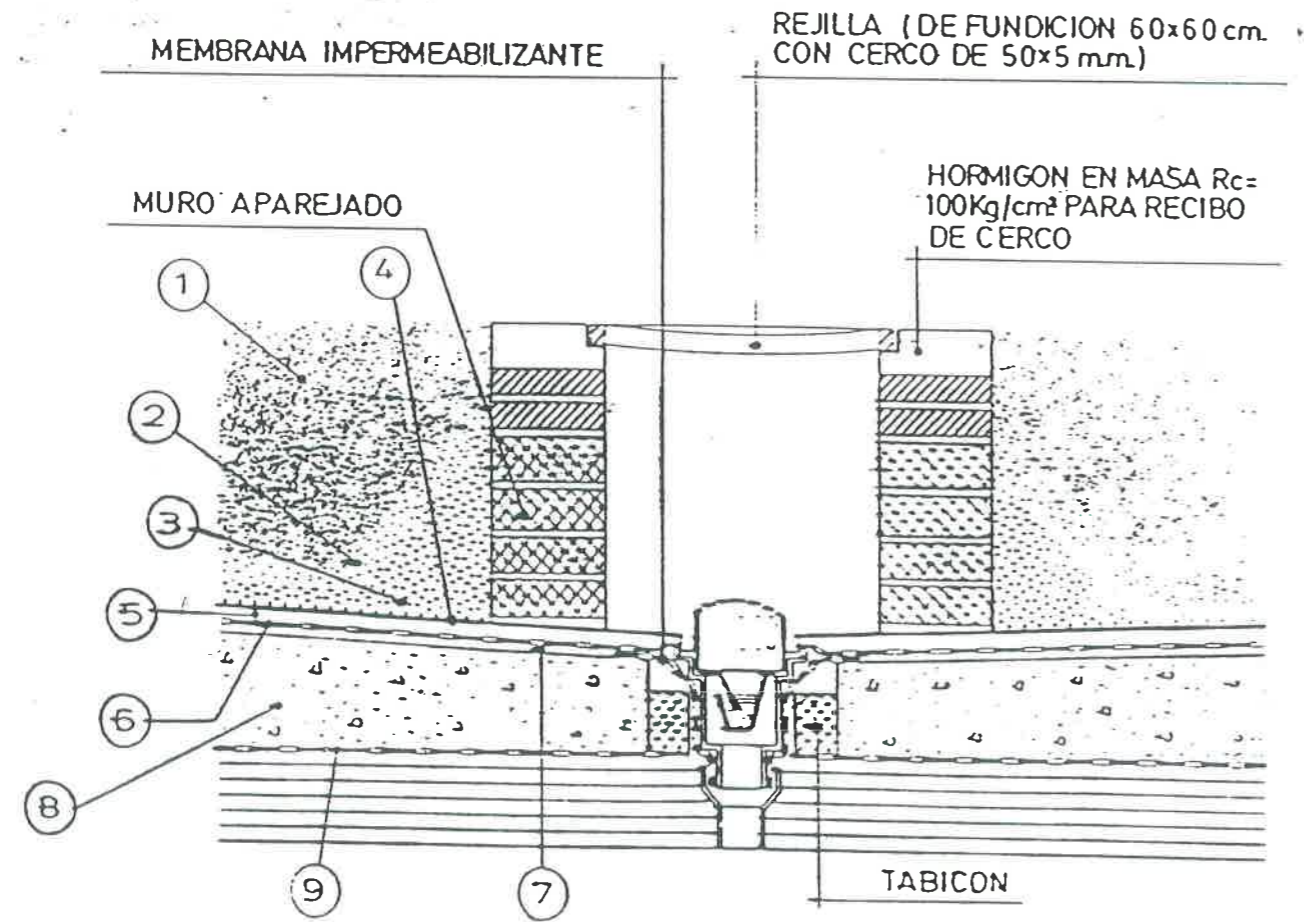




LIMAHOYA EN FALDON PARA AJARDINAR



JUNTA DE DILATACION EN FALDON PARA AJARDINAR

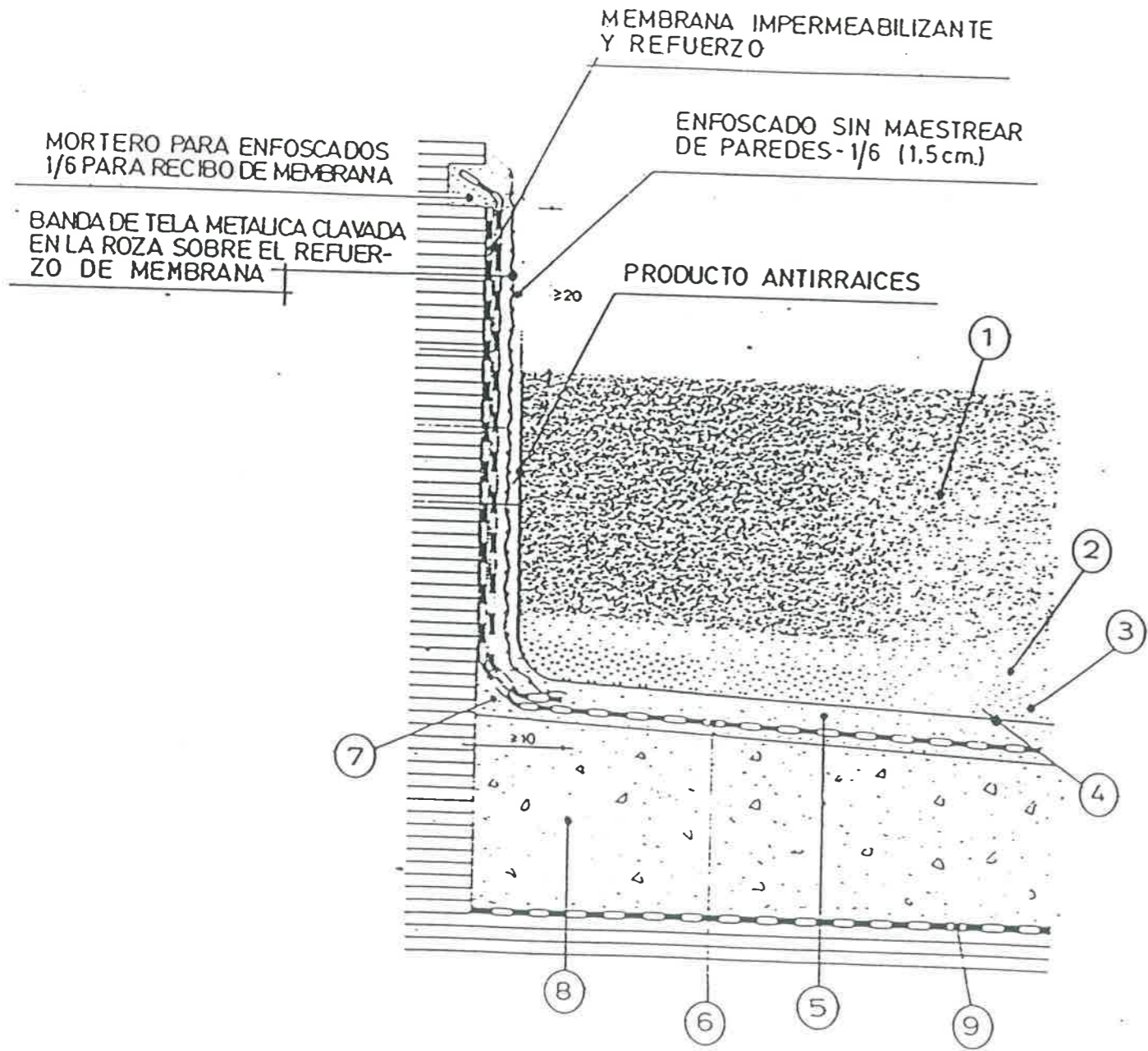


ENCUENTRO DE FALDON PARA AJARDINAR CON SUMIDERO

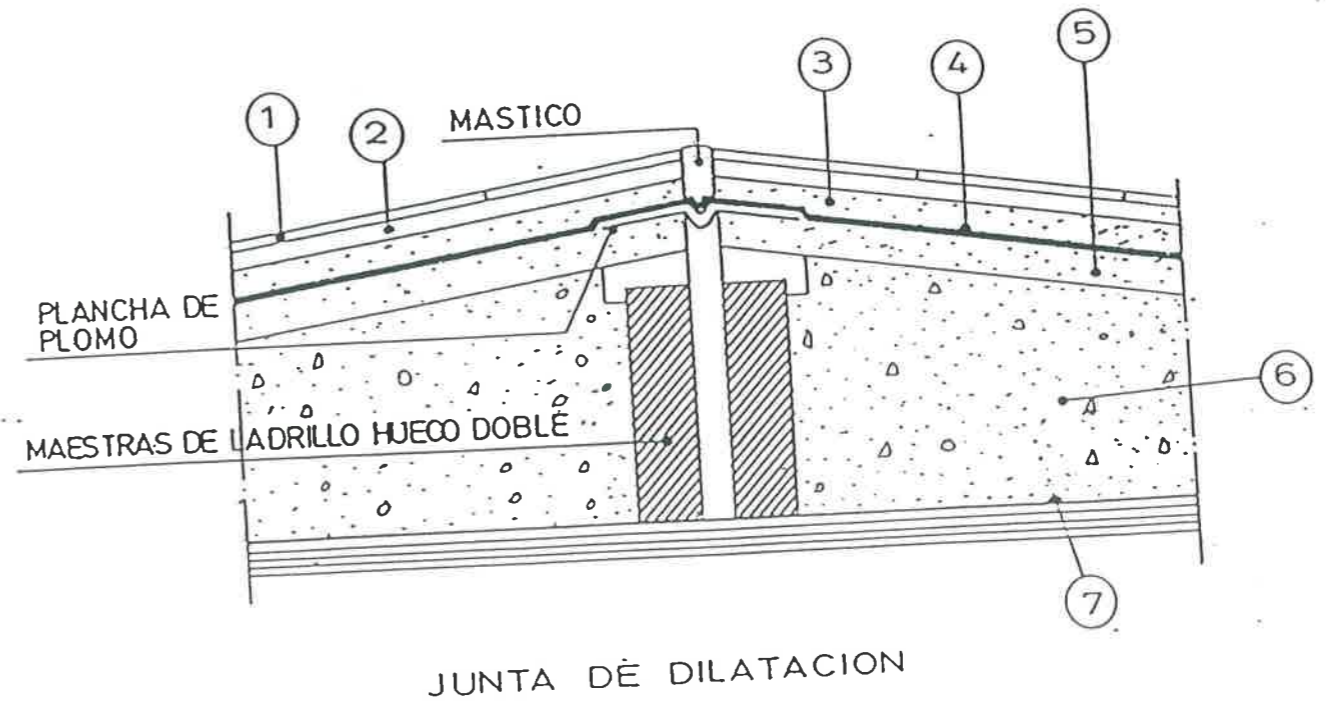
LEYENDA AZOTEAS AJARDINADAS

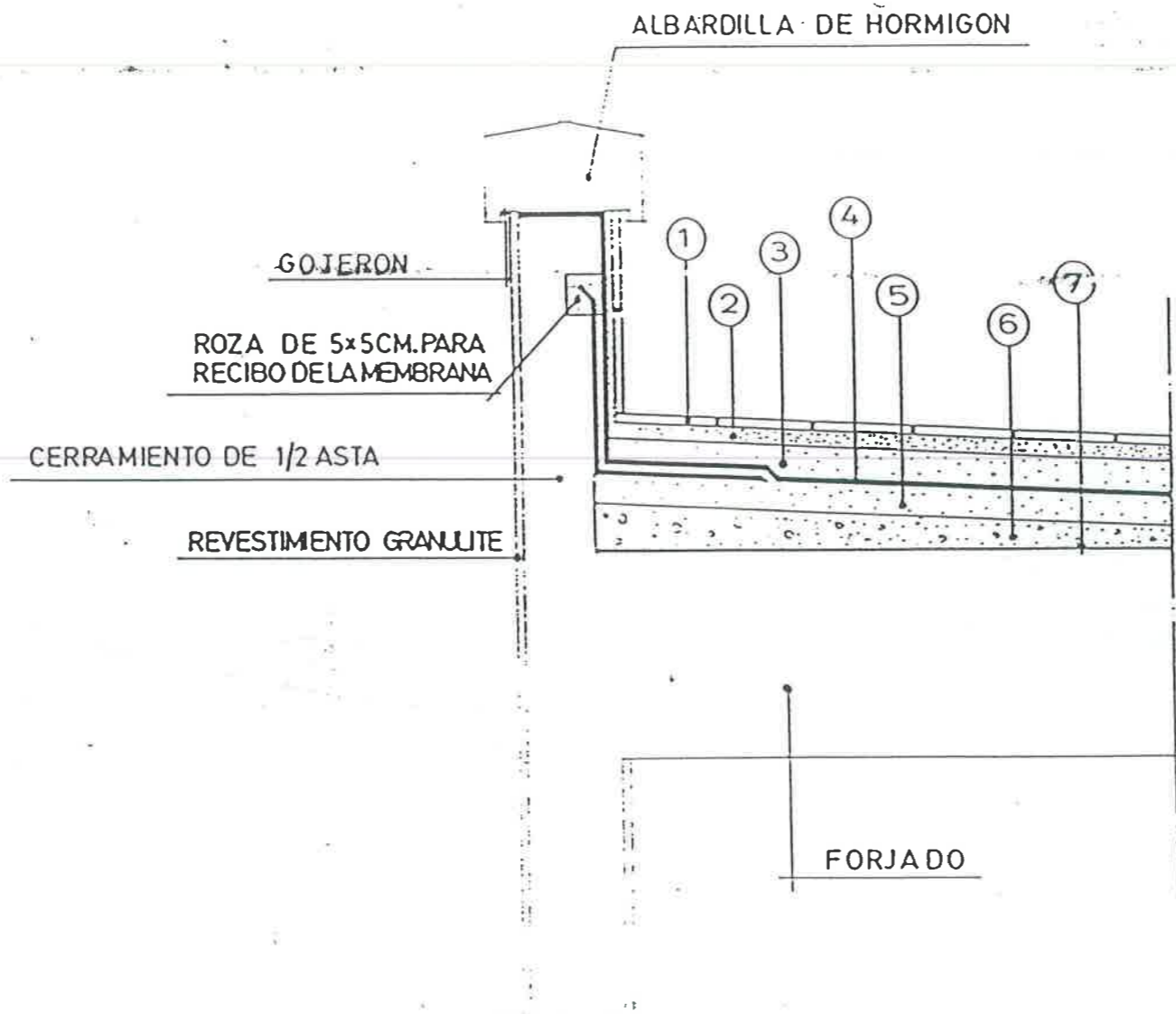
- ① TIERRA PARA PLANTACION
- ② ARENA T.M.A. 5mm. (3cm)
- ③ GRAVA T. ENTRE 20 Y 50 mm. (5 cm)
- ④ PRODUCTO ANTIRRAICES
- ⑤ MORTERO PARA ENFOSCADOS- 1/6 - (3cm) ANGULOS REDONDEADOS
- ⑥ MEMBRANA IMPERMEABILIZANTE.
- ⑦ MORTERO 1/6 (1cm) ANGULOS REDONDEADOS
- ⑧ HORMIGON ALIGERADO
- ⑨ BARRERA DE VAPOR - OXIASFALTO 1.5 Kg/m²





ENCUENTRO DE FALDON PARA AJARDINAR CON PARAMENTOS



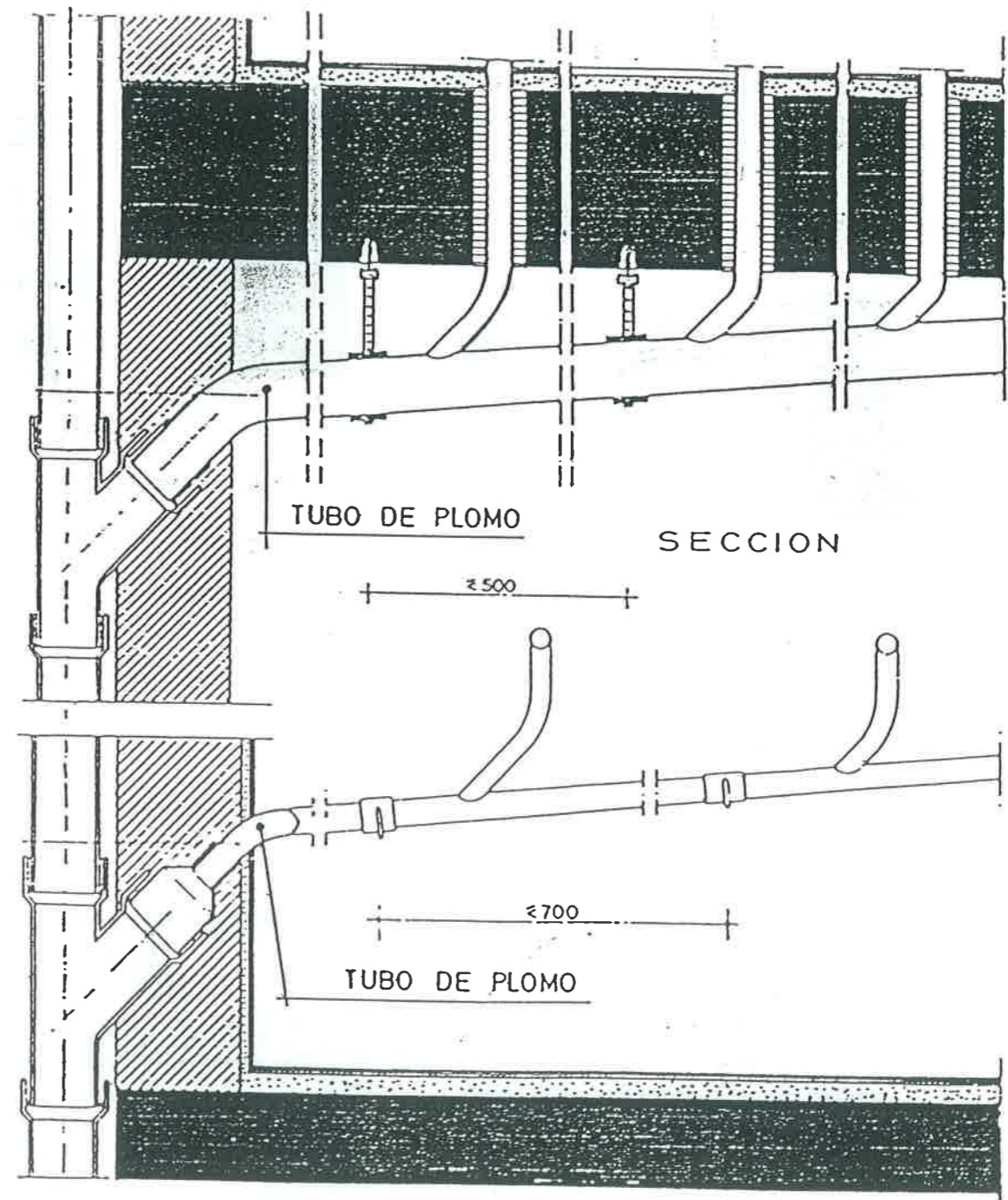
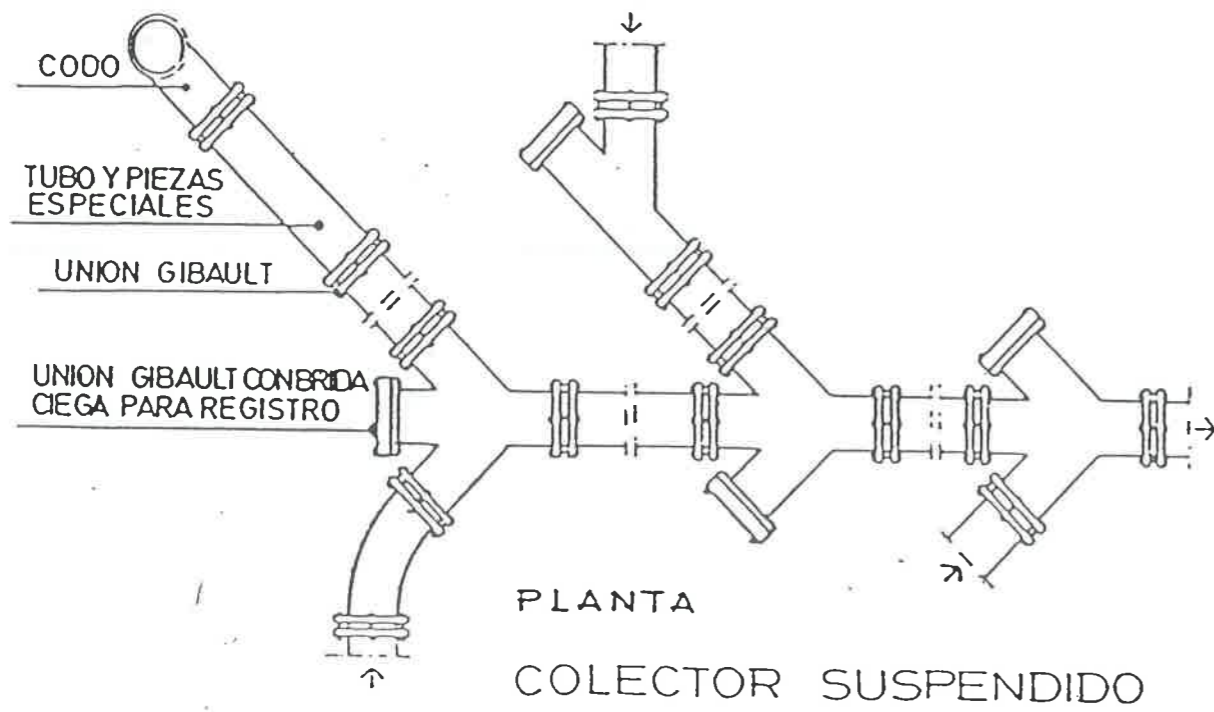
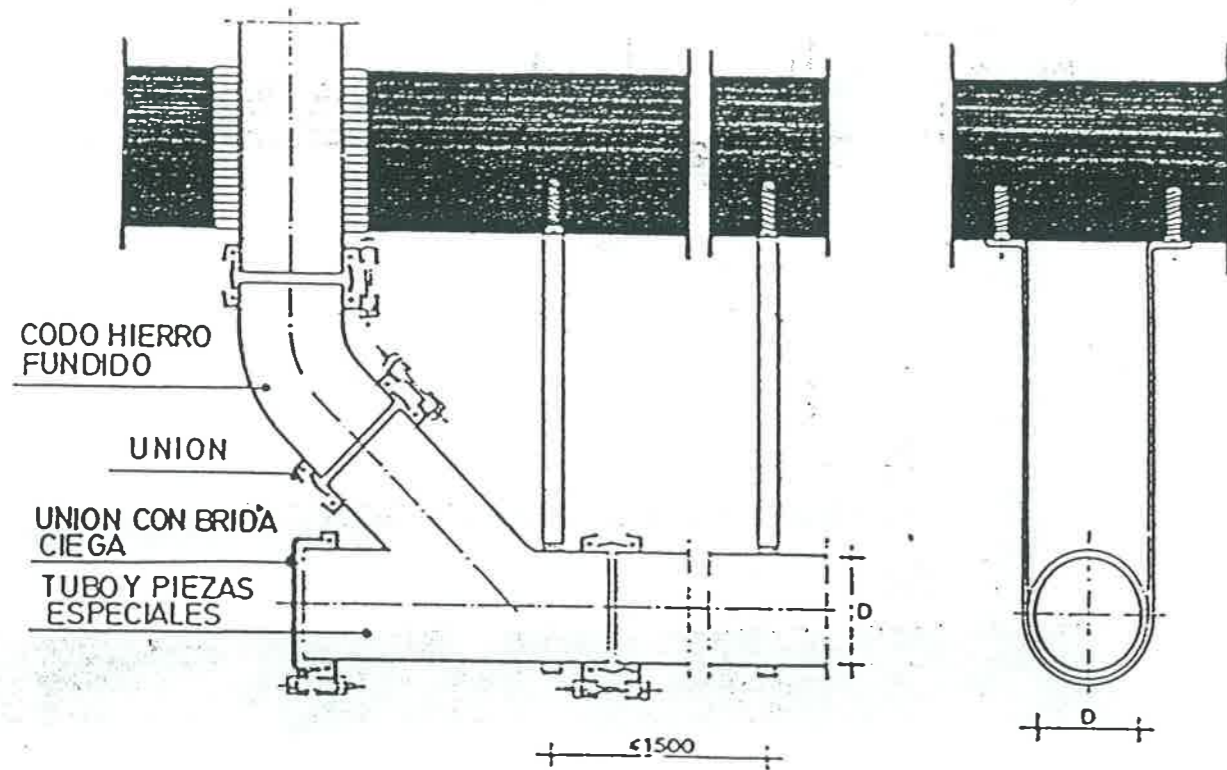


ENCUENTRO DE FALDON DE H. ALIGERADO CON PARAMENTO Y REMATE EN TORREON



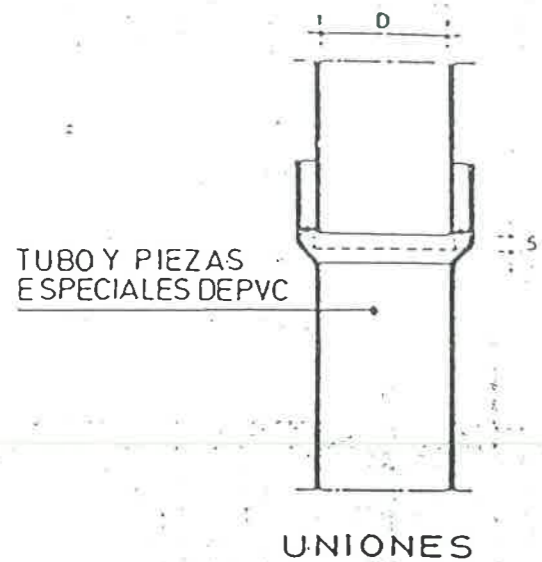
SECCION LONGITUDINAL

SECCION TRANSVERSAL

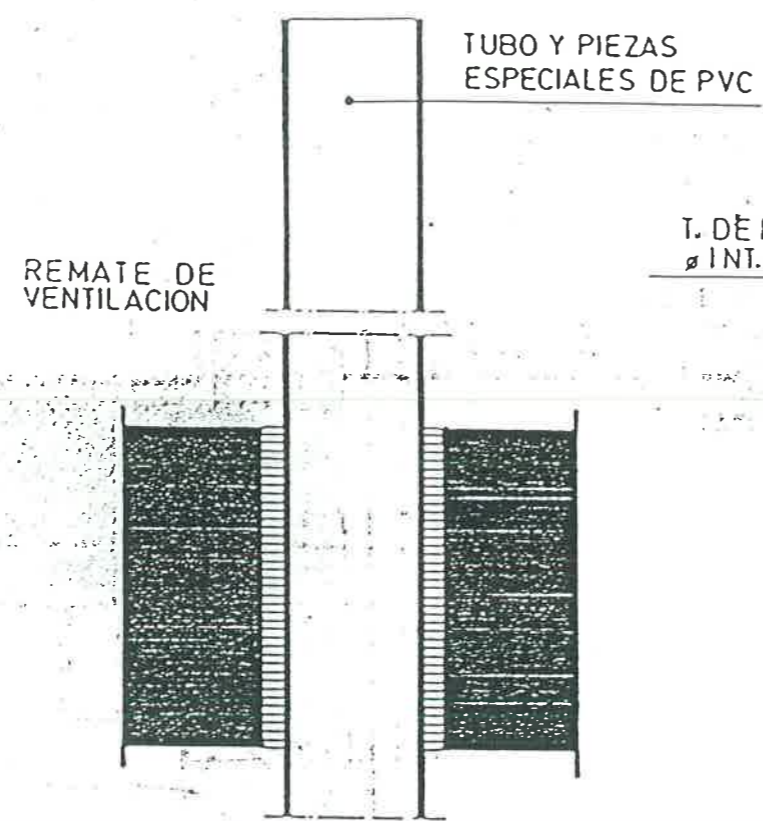


DERIVACION

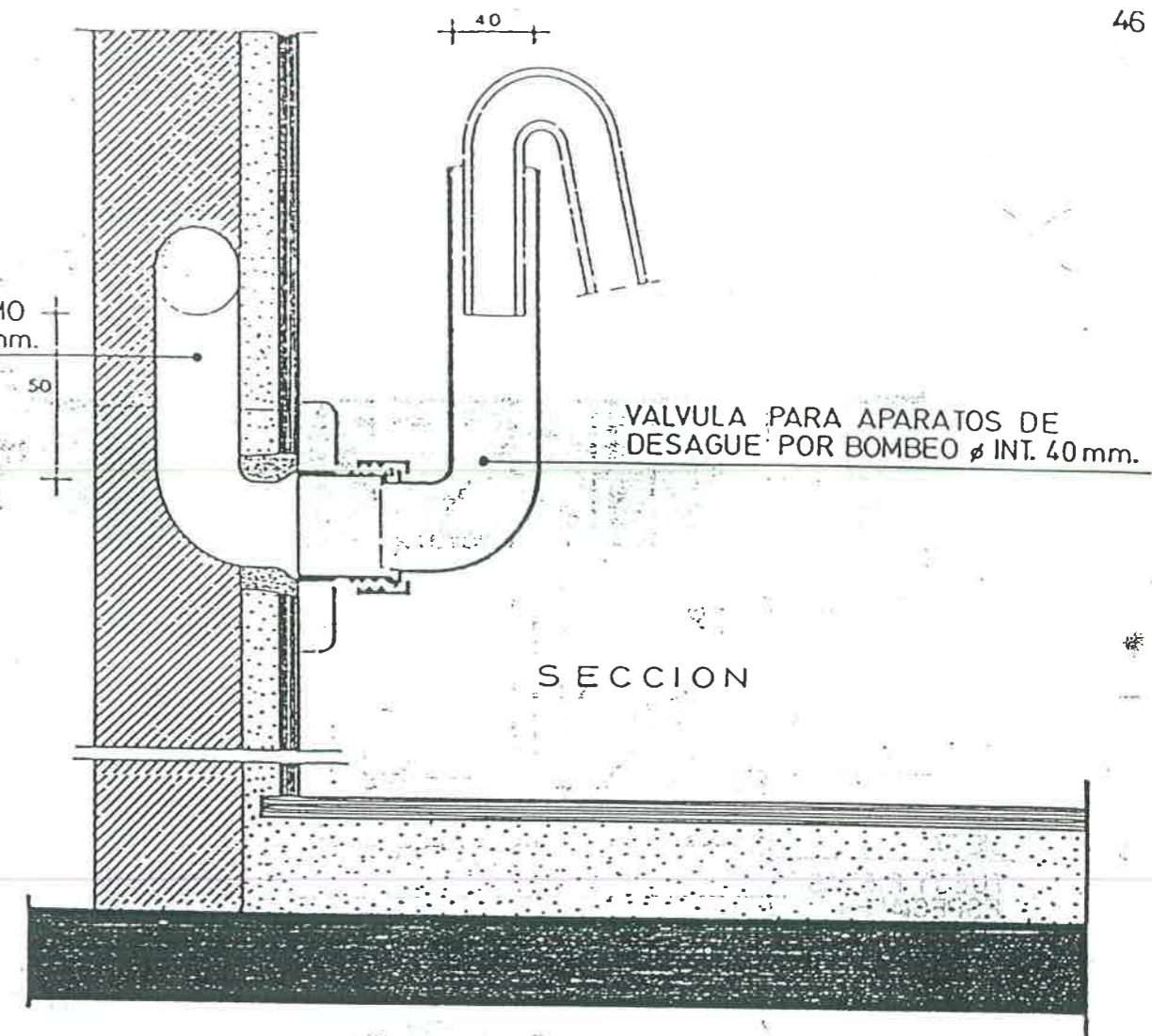




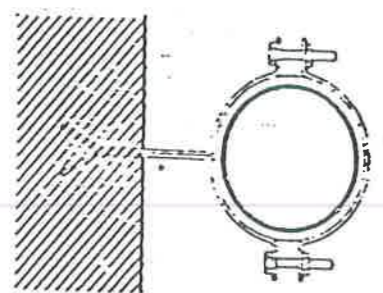
UNIONES



PASO POR FORJADOS

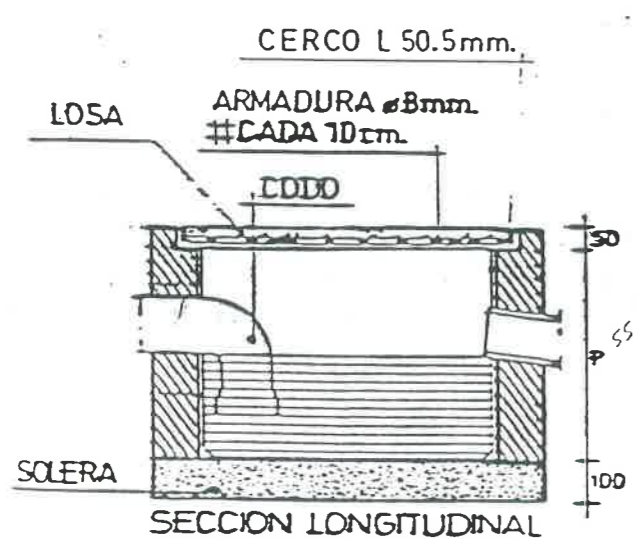


DESAGUE DE APARATOS DE BOMBEO



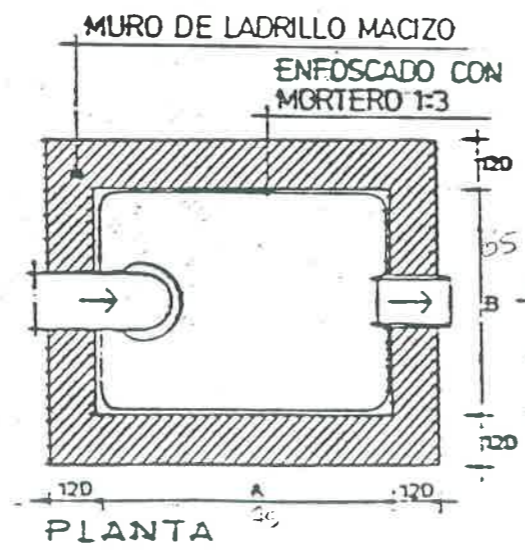
SUJECION

BAJANTE DE PVC

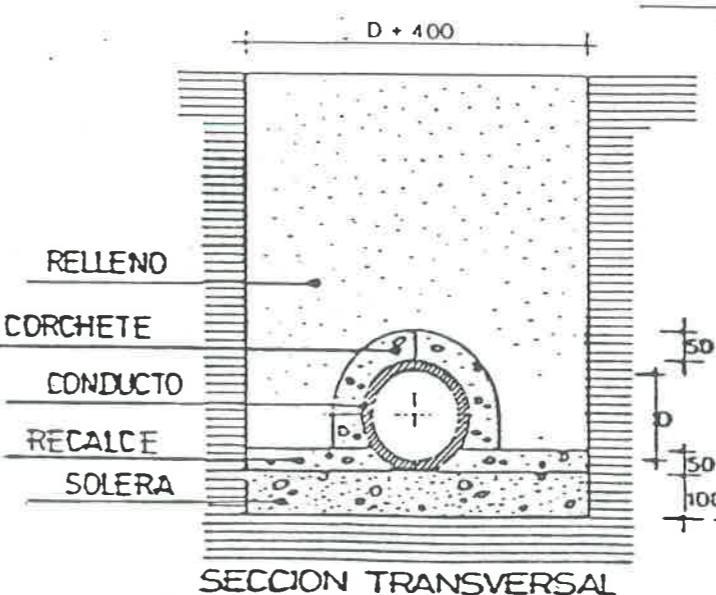


SECCION LONGITUDINAL

ARQUETA SIFONICA

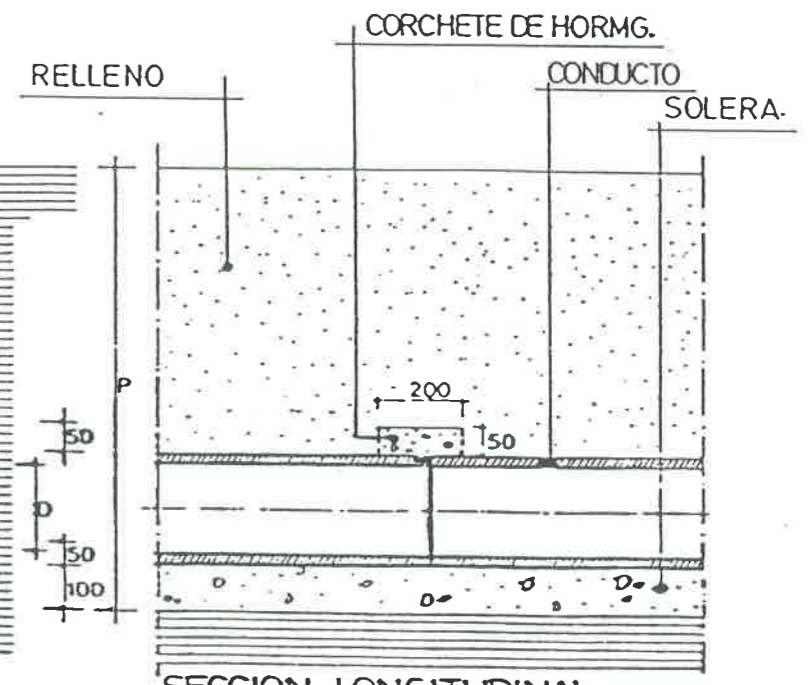


PLANTA



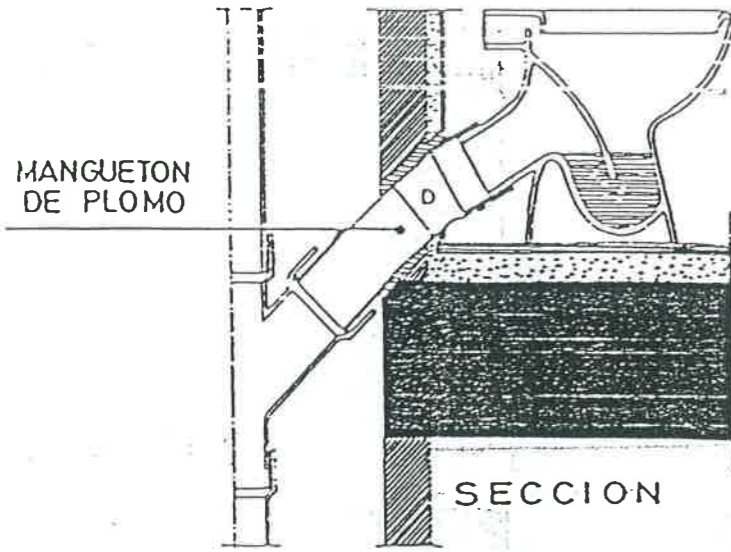
SECCION TRANSVERSAL

COLECTOR ENTERRADO DE HORMIGON

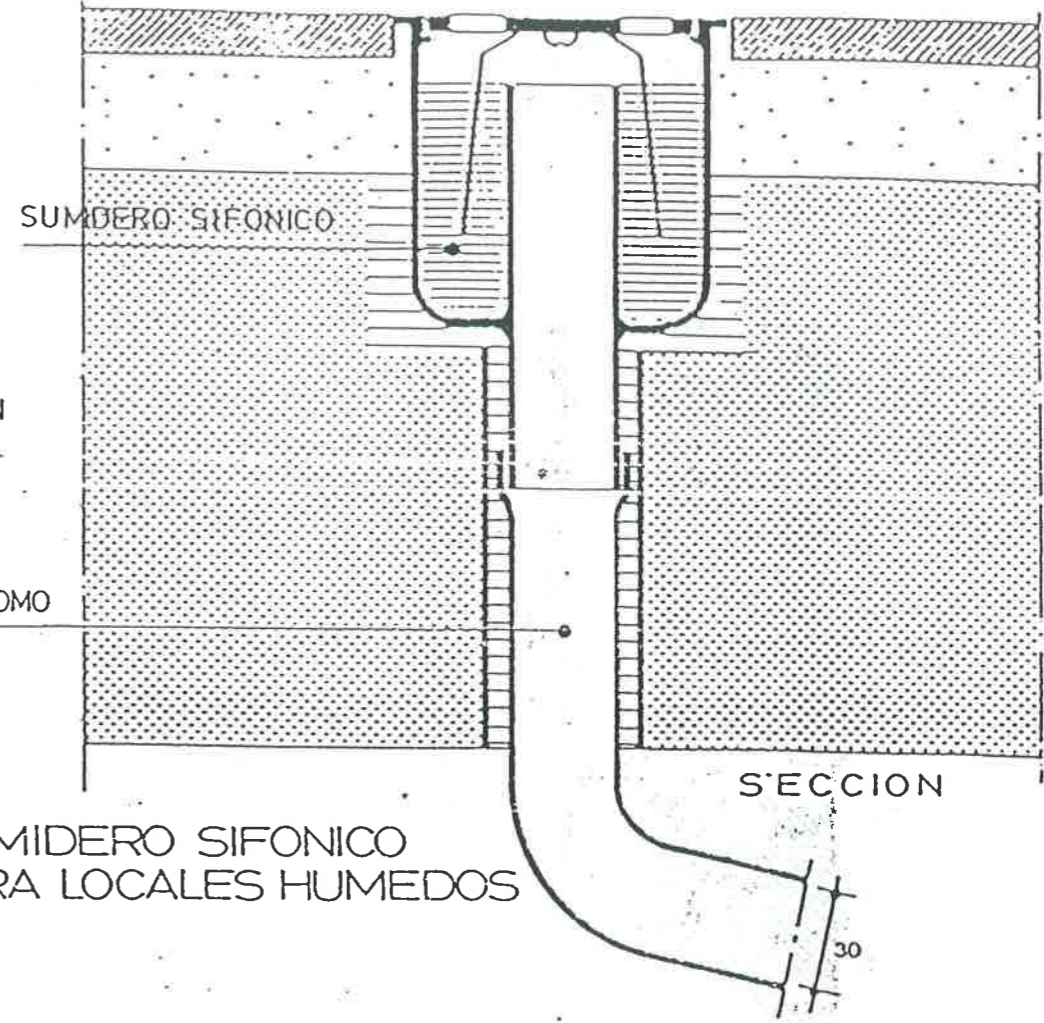
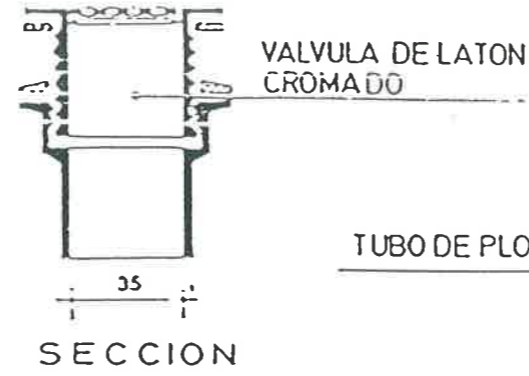


SECCION LONGITUDINAL

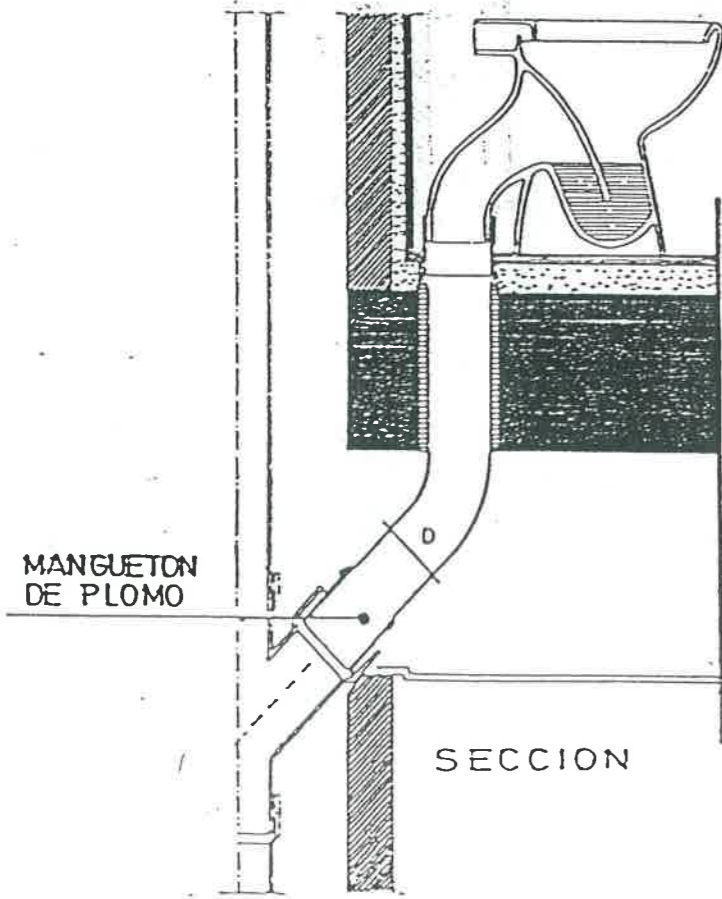




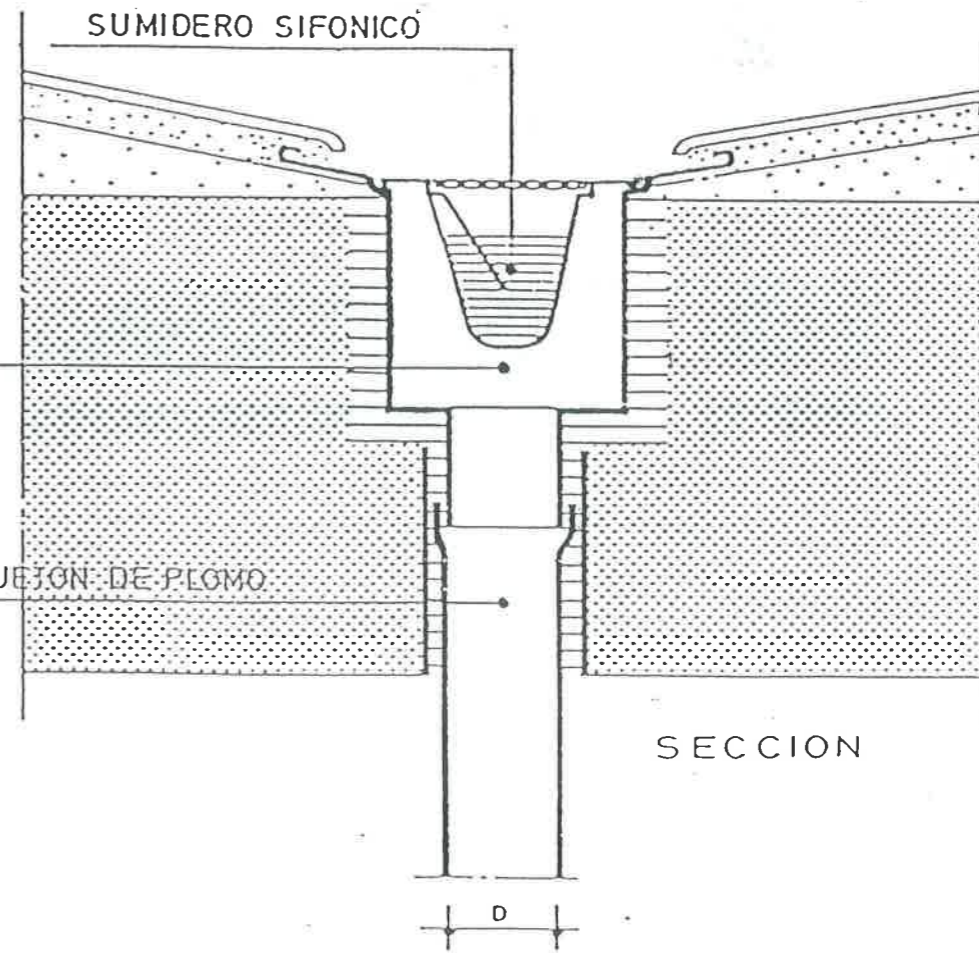
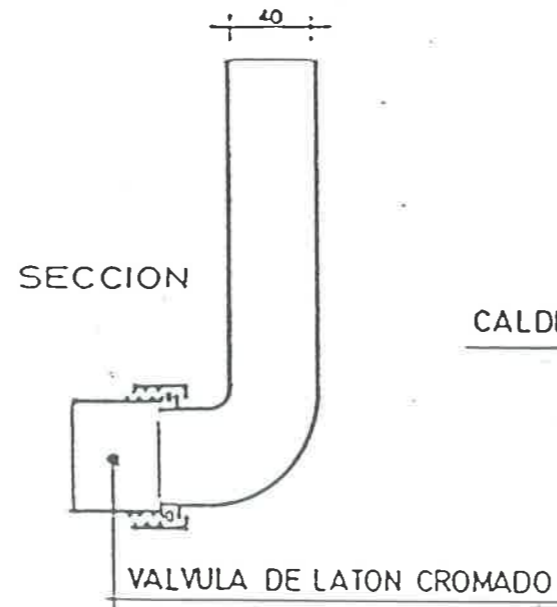
VALVULA DE DESAGUE PARA PLATO DE DUCHA



SUMIDERO SIFONICO PARA LOCALES HUMEDOS



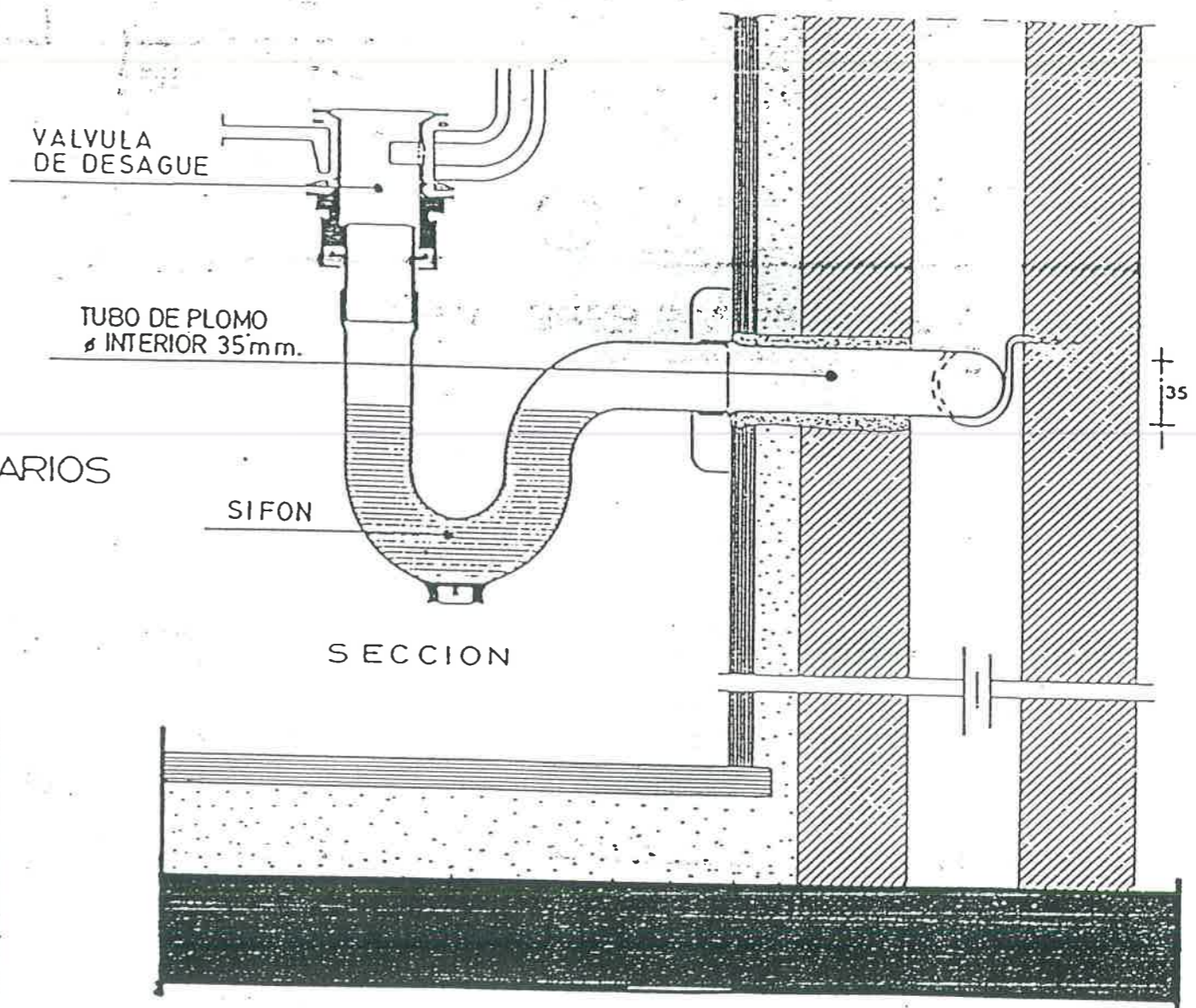
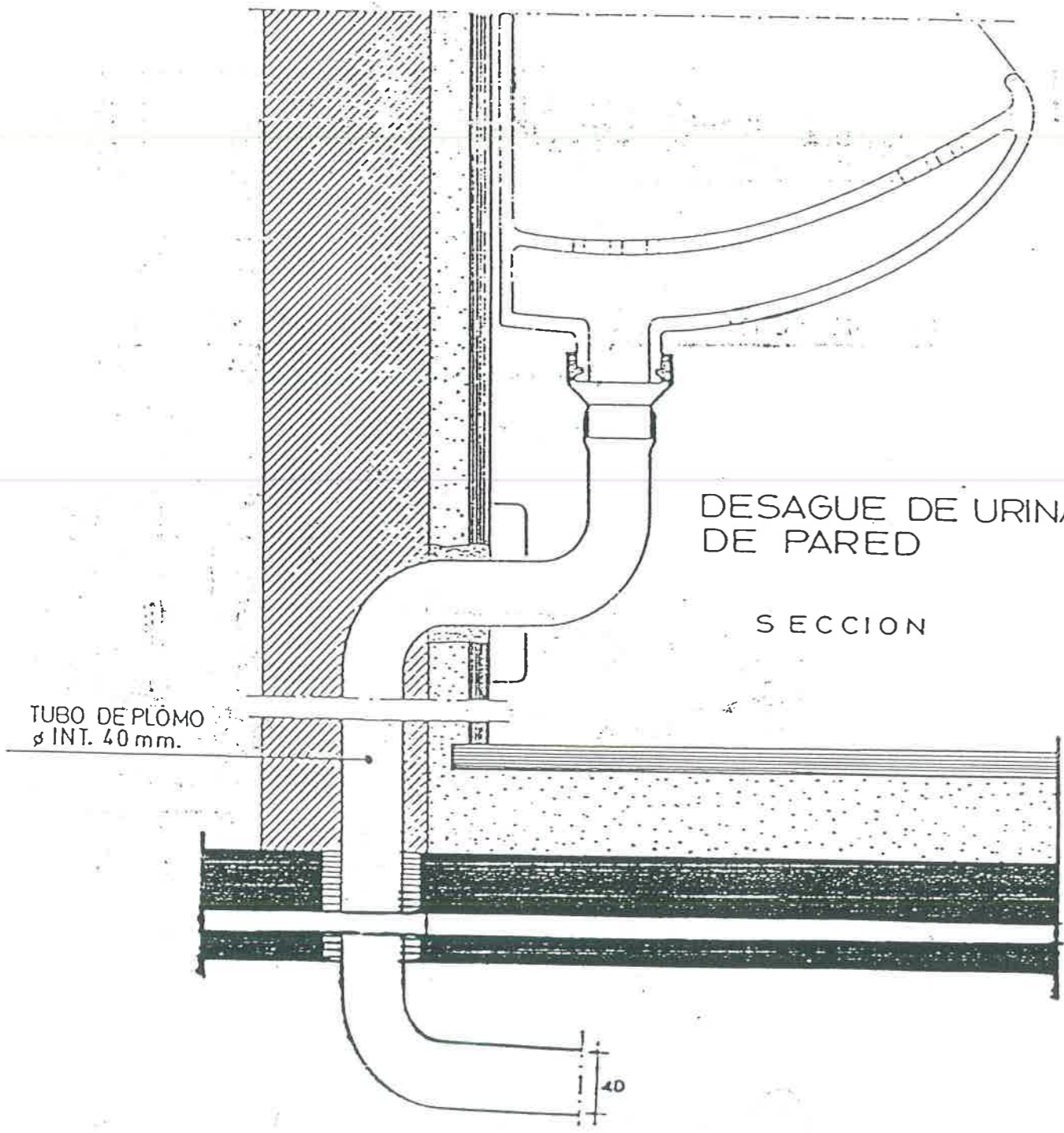
VALVULA PARA APARATOS DE DESAGUE POR BOMBEO



SUMIDERO SIFONICO PARA AZOTEAS TRANSITABLES

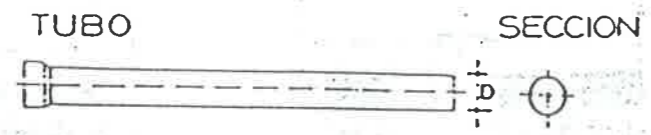
DESAGUE DE INODOROS





DESAGUE DE LAVABOS CON SIFON INDIVIDUAL

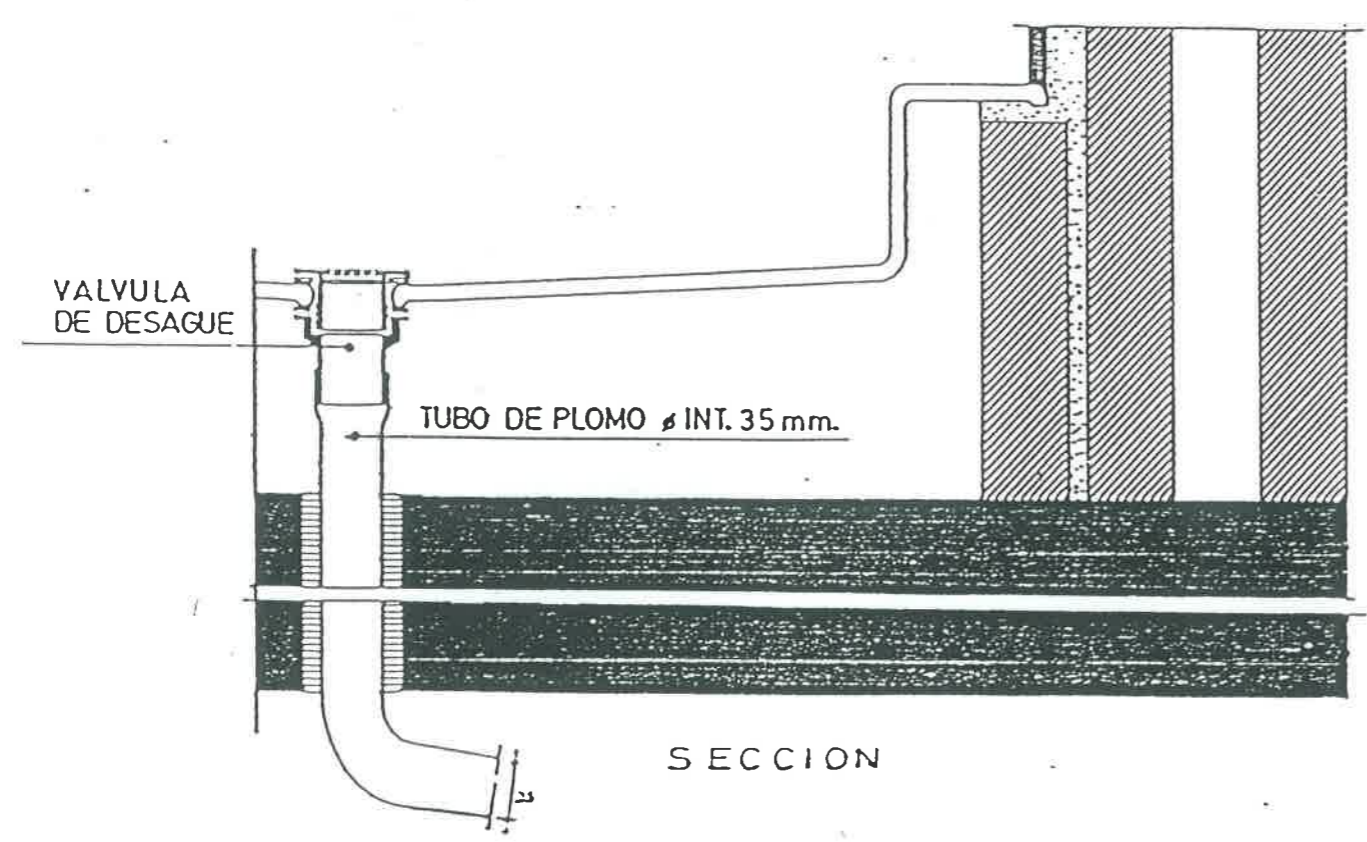
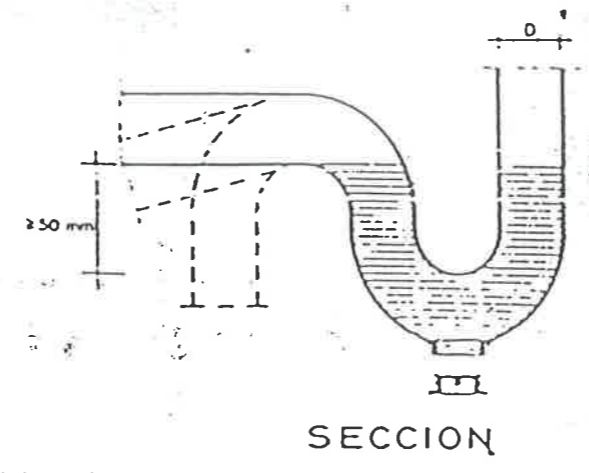




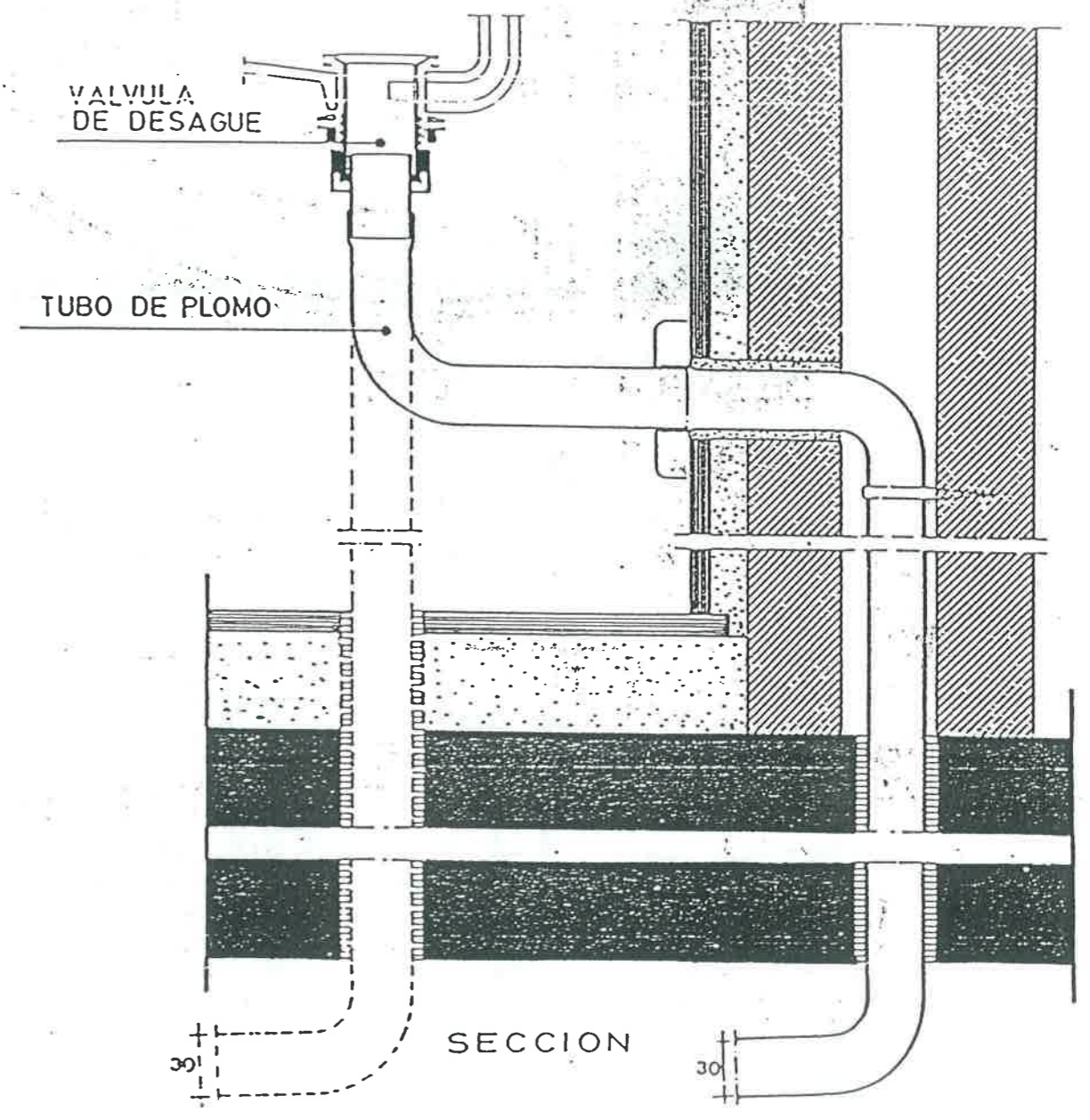
### SIFON



TUBO Y PIEZAS ESPECIALES DE PVC

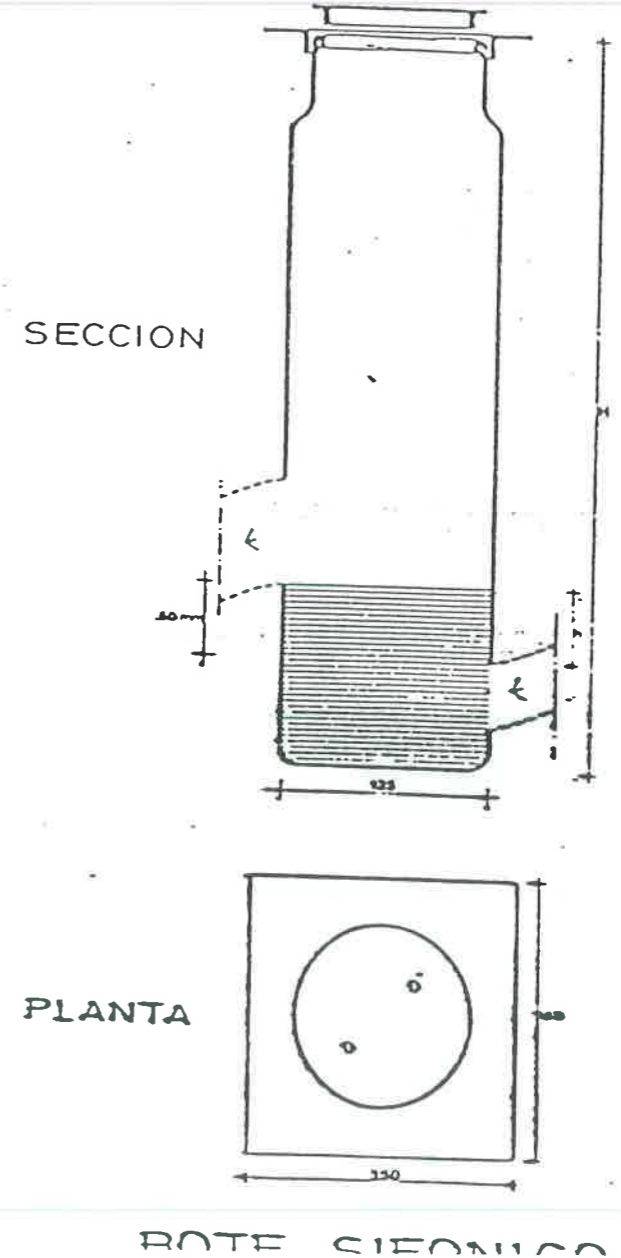
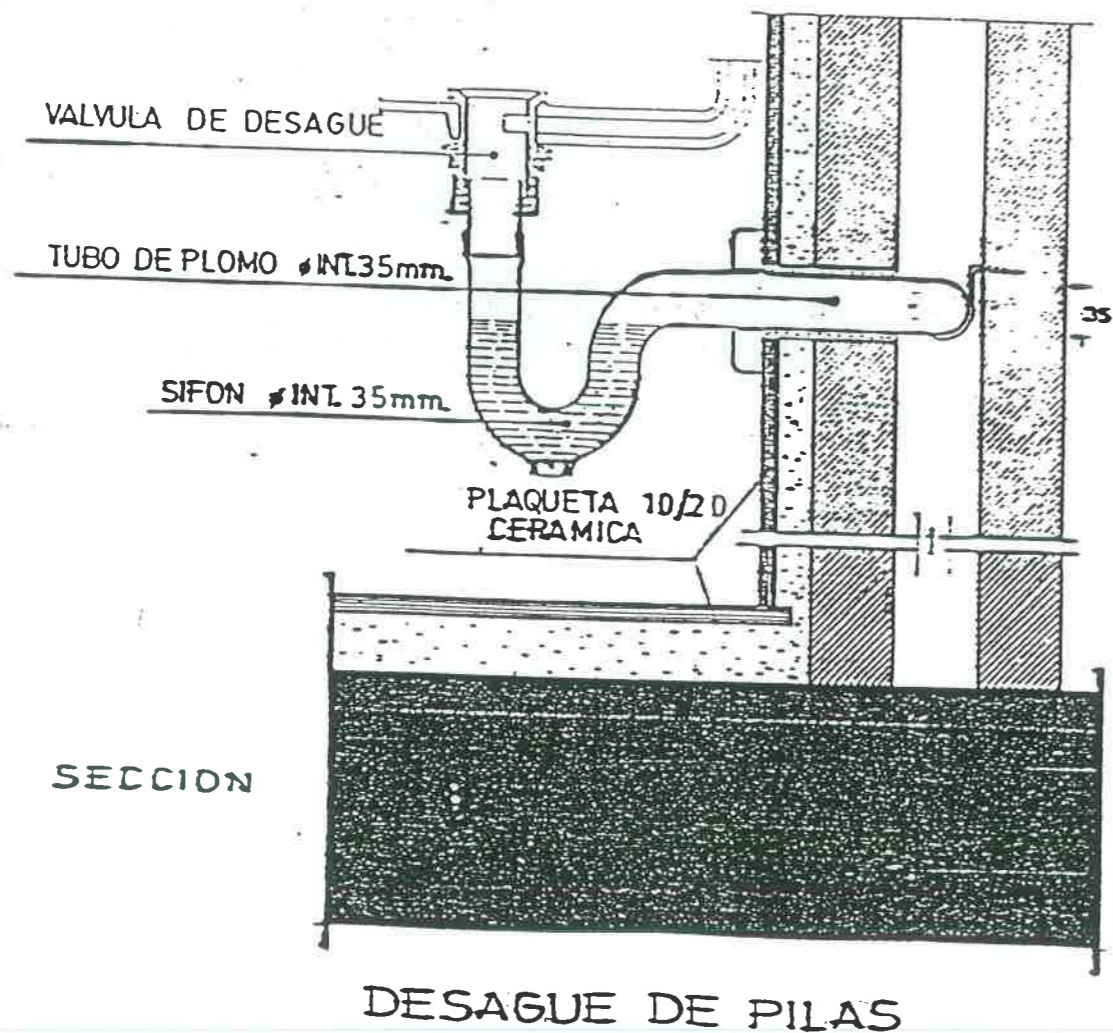
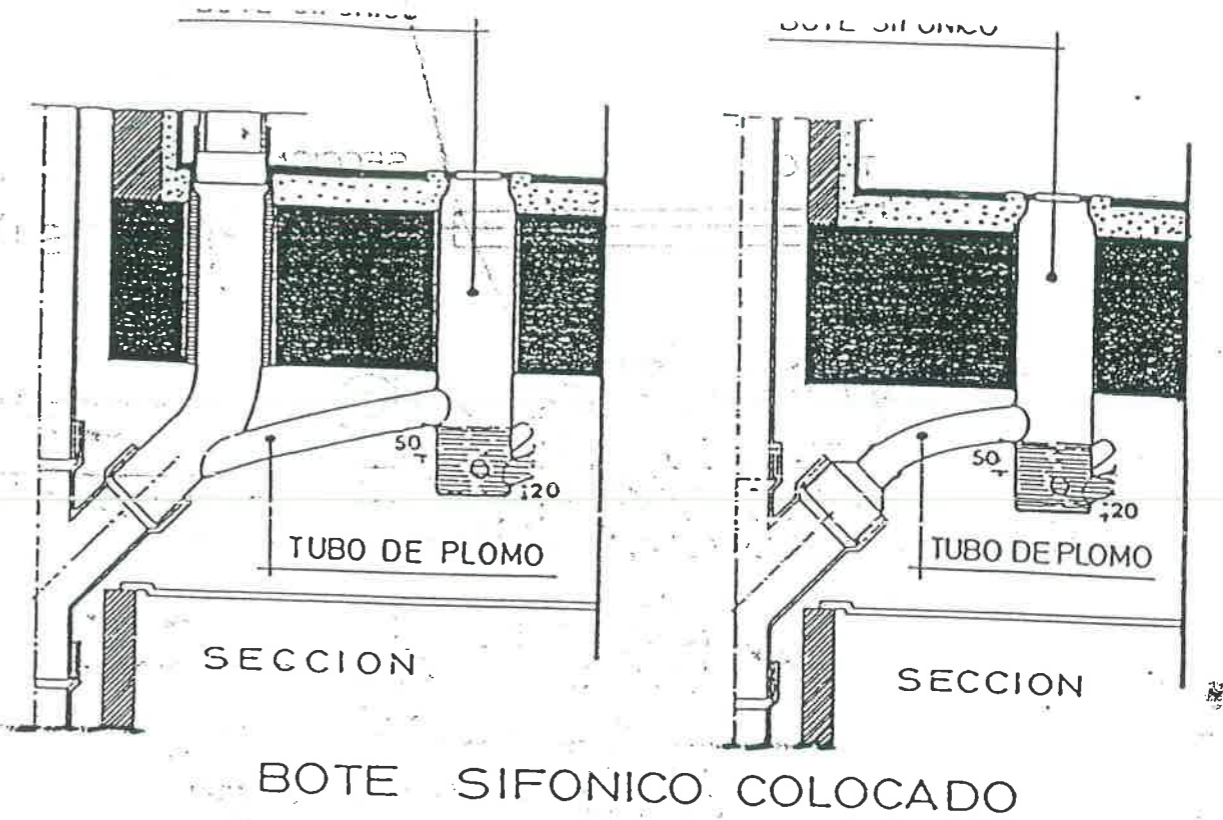
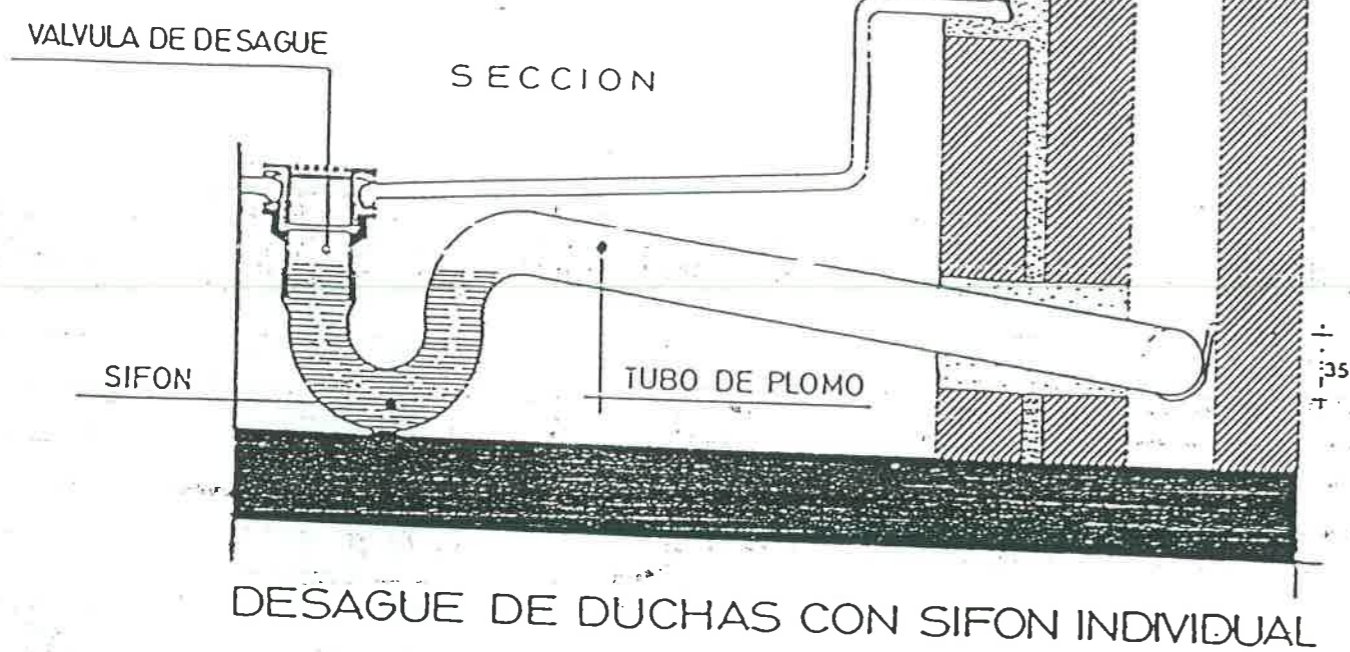


DESAGUE DE DUCHAS A BOTE SIFONICO

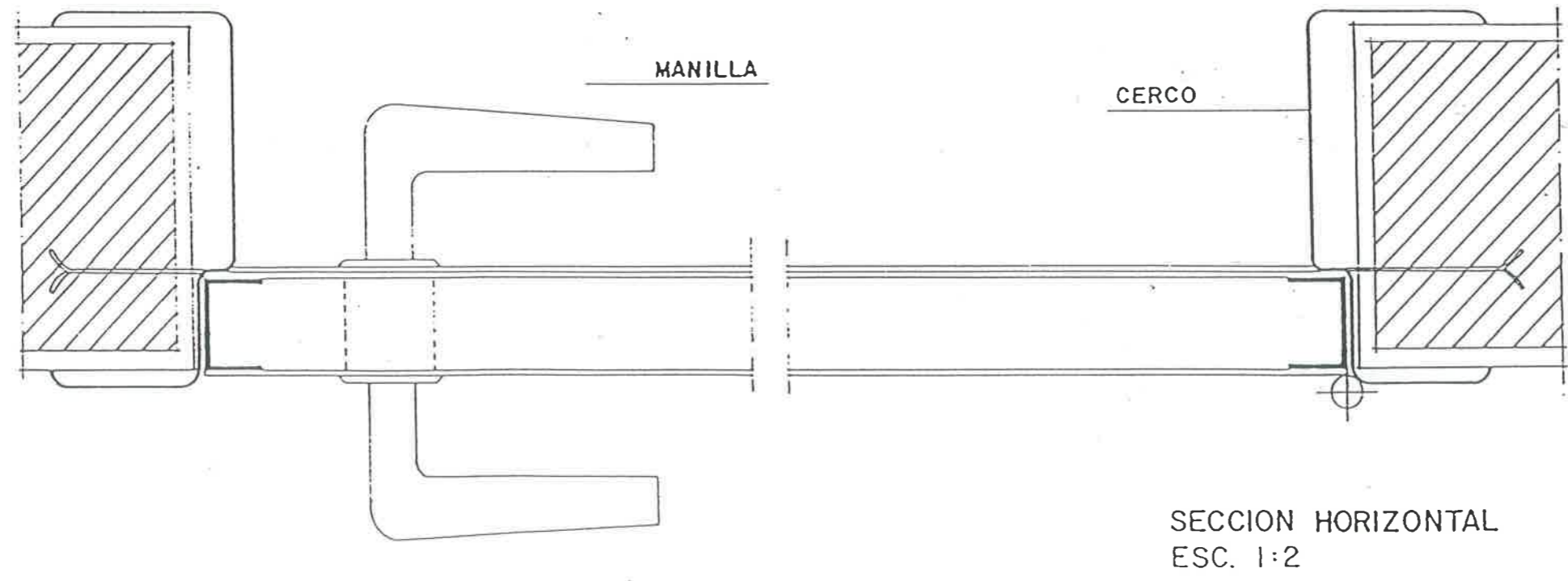
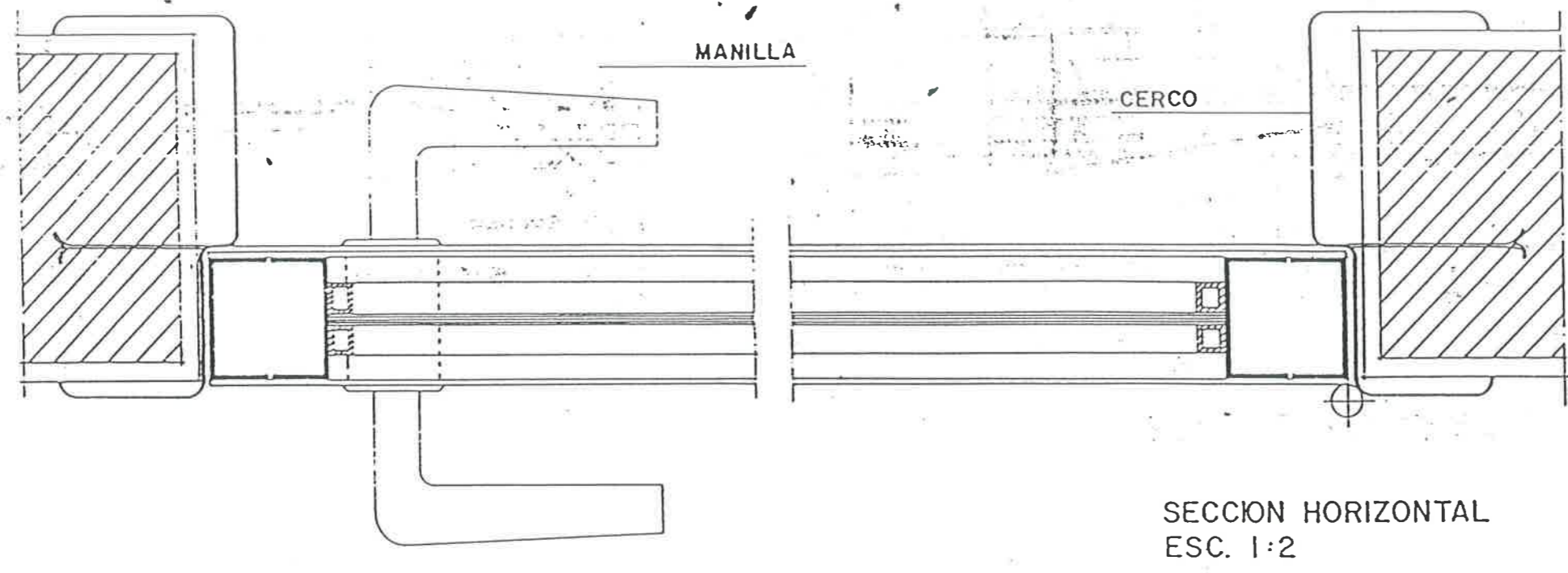


DESAGUE DE LAVABOS Y PILAS A BOTE SIFONICO

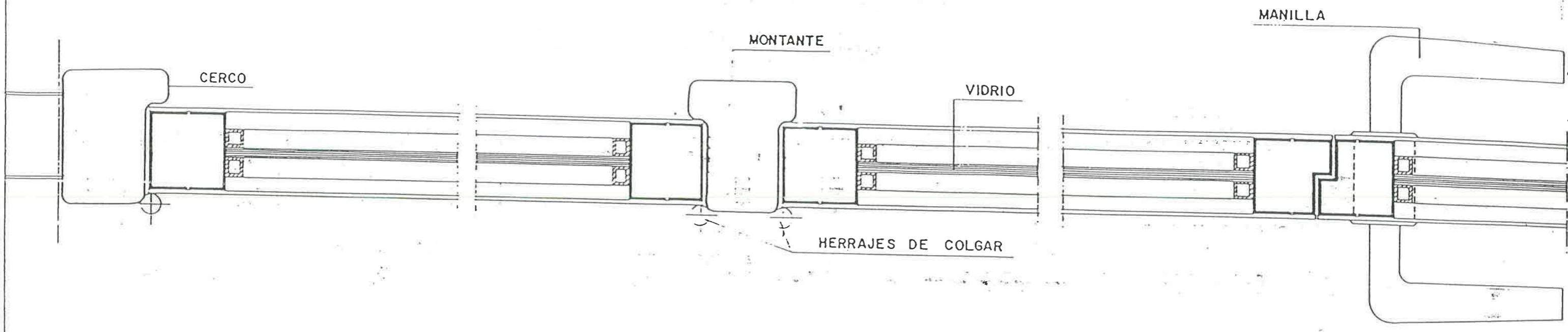




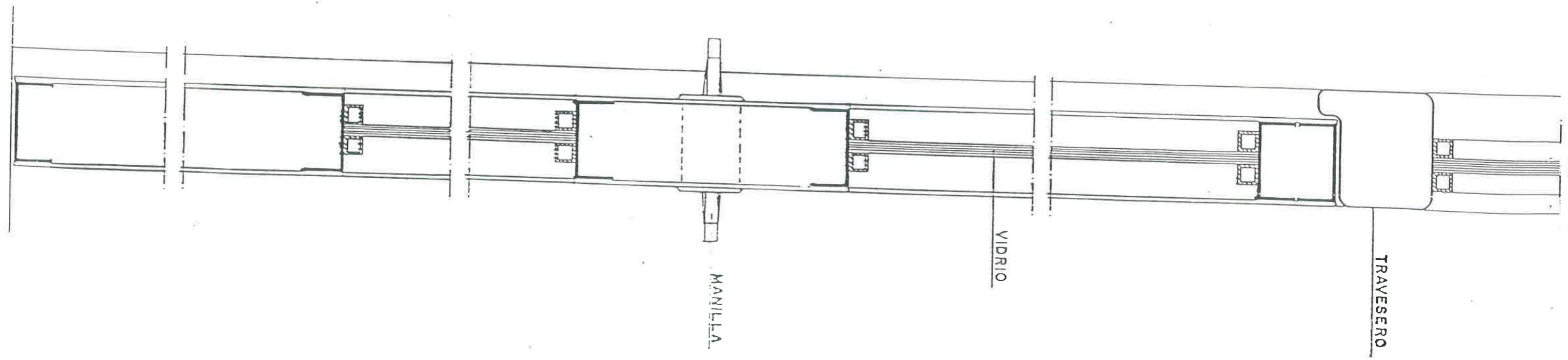
# CARPINTERIA METALICA

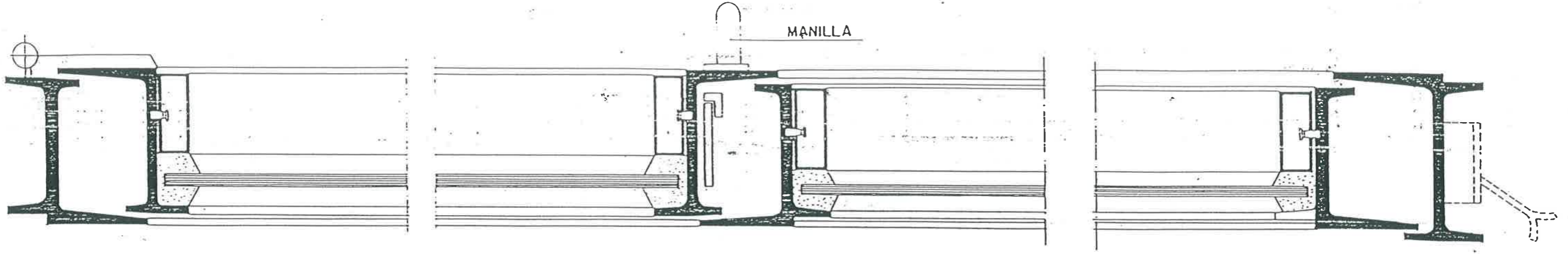




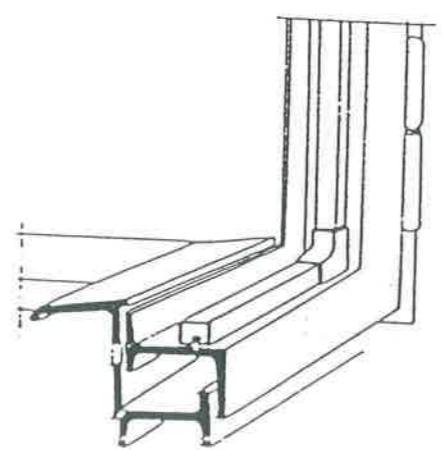


SECCION HORIZONTAL  
ESC. 1:2  
PARA P-7 Y P-8 SIN  
MONTANTE CENTRAL.





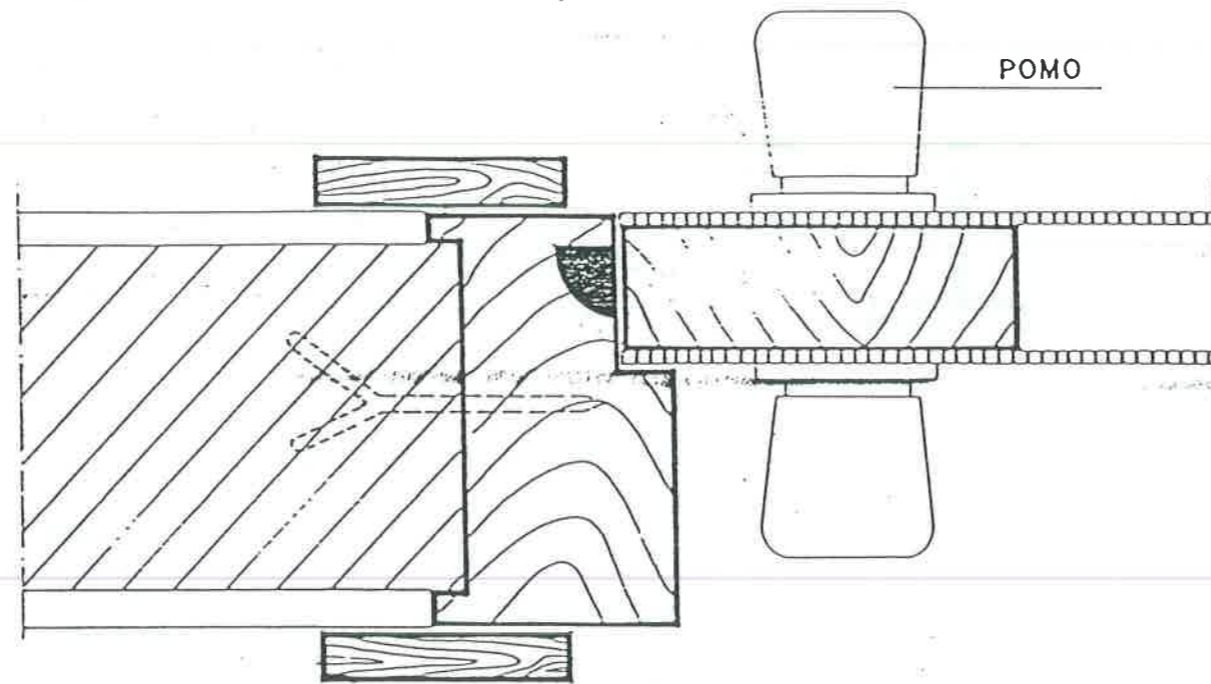
SECCION HORIZONTAL  
ESC. 1:1



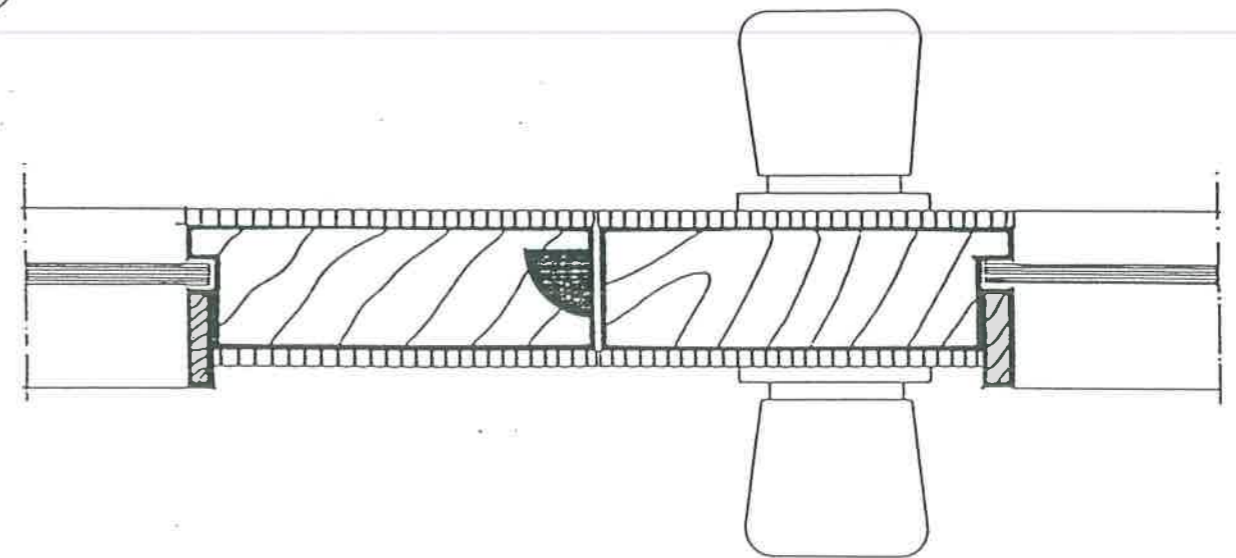
PERSPECTIVA VIERTEAGUAS  
VENTANA

NOTA : SE HA DIBUJADO LA SECCION TIPO, INDEPENDIEMENTE DE QUE LAS PUERTAS ABRAN A DERECHA O IZQUIERDA, O EL MARCO SEA EN PADED DE 0.15, 0.10 ó 0.05.

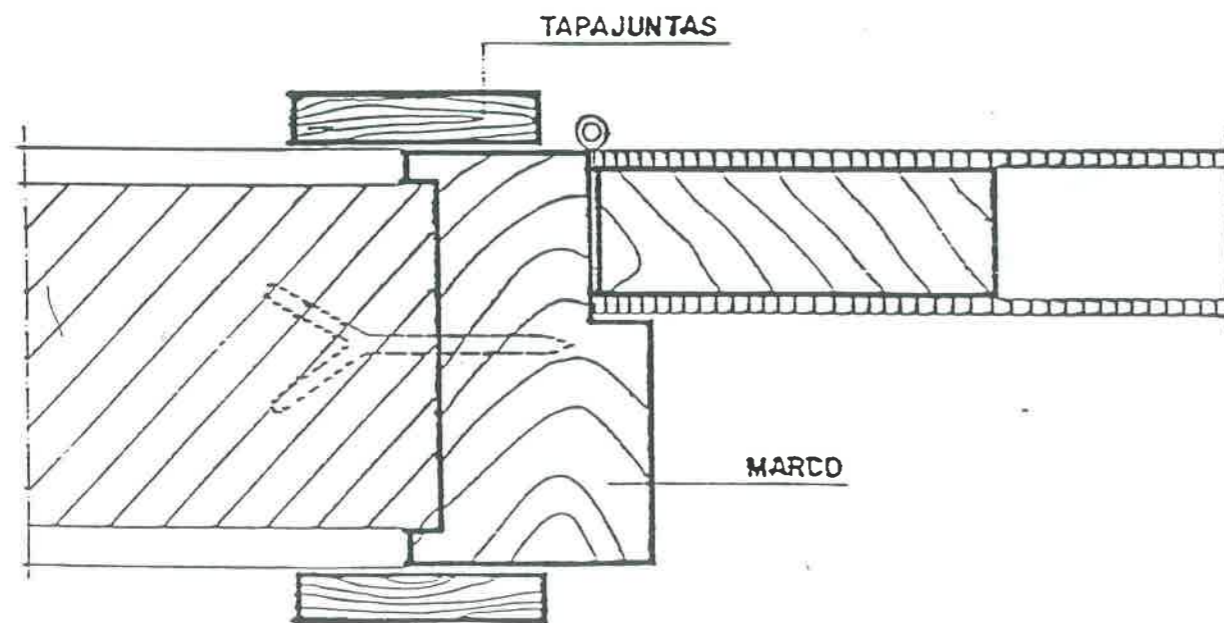




SECCION POR EL POMO  
ESC. 1:2

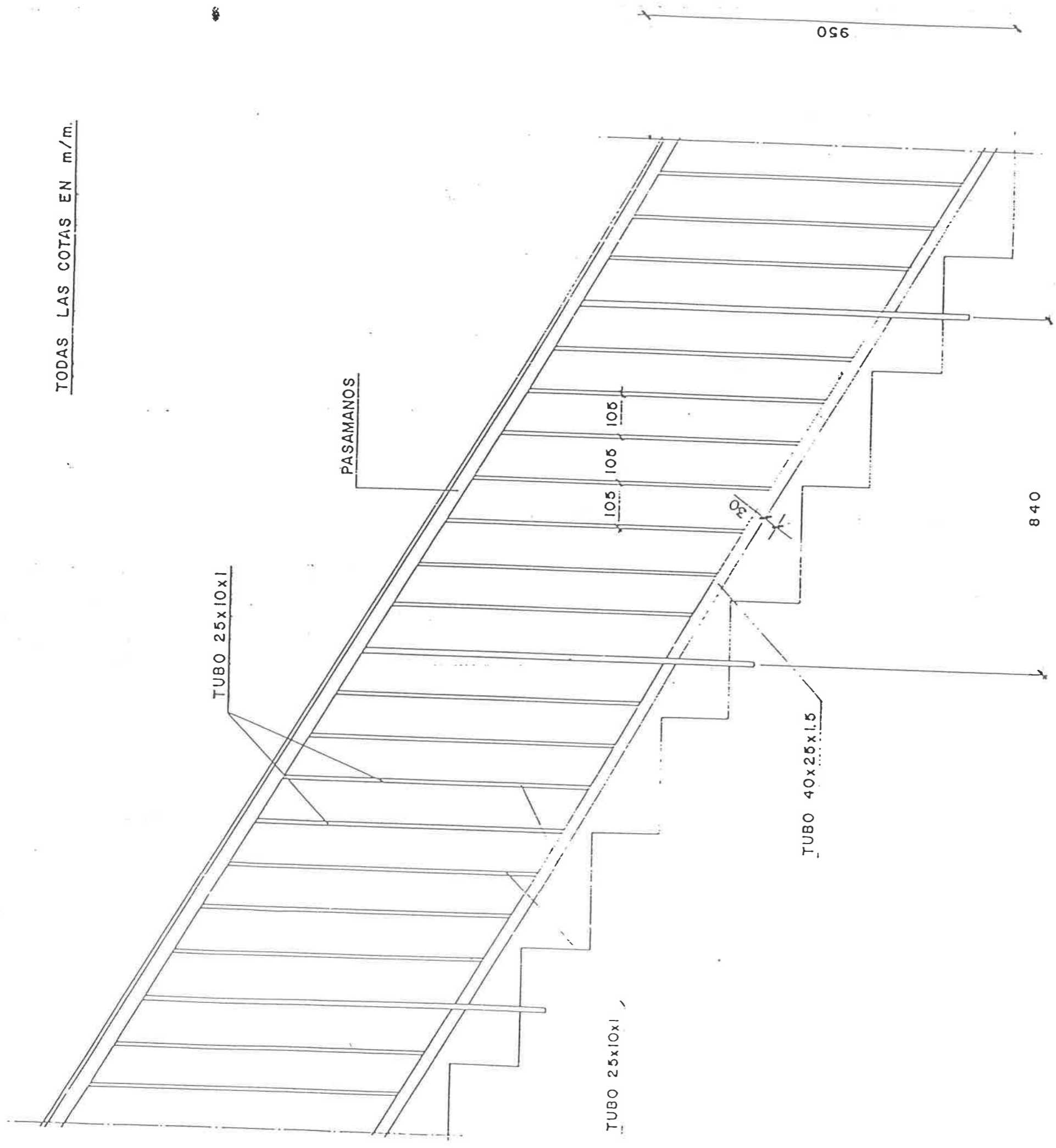


PUERTA DOBLE  
ENCUENTRO 2 HOJAS  
ESC. 1:2



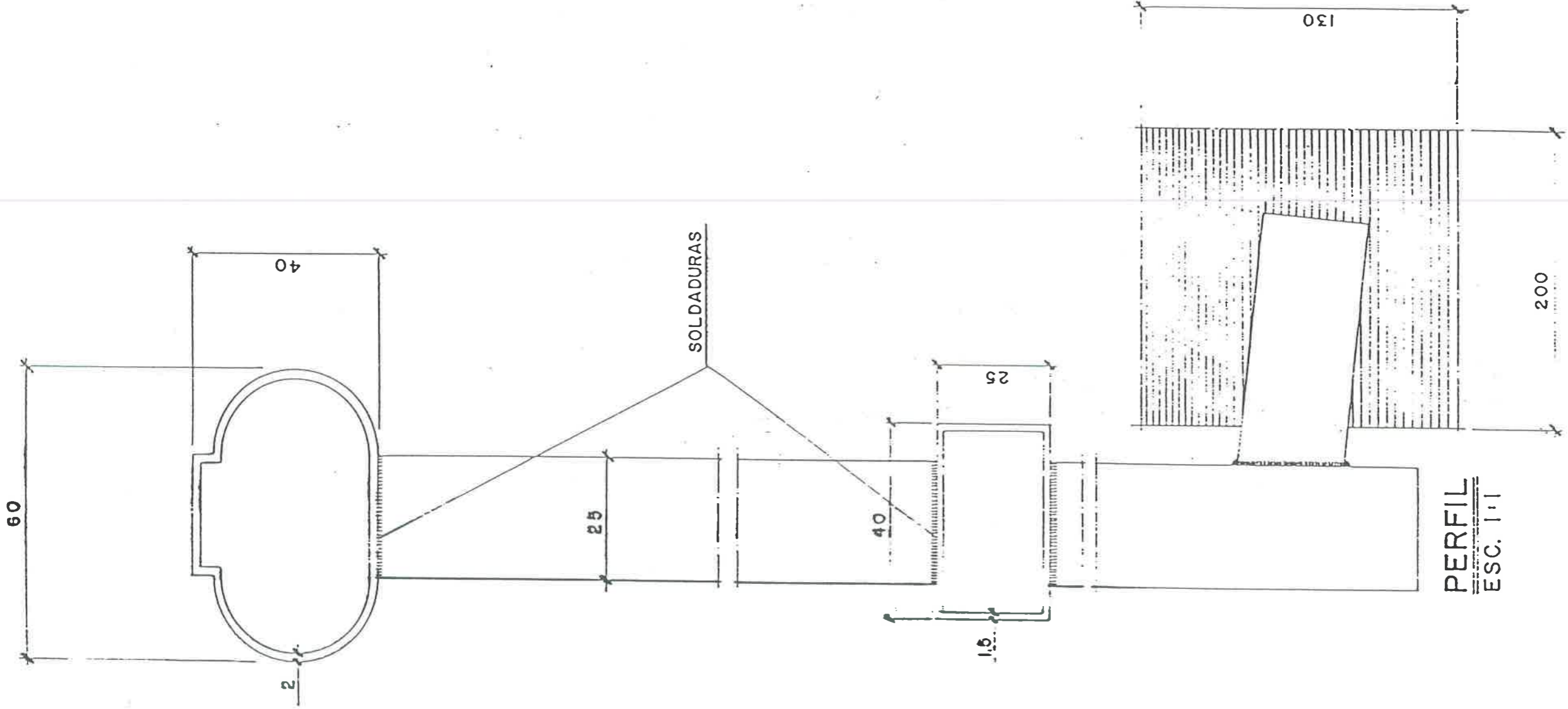
SECCION POR LA VISAGRA

TODAS LAS COTAS EN m/m.

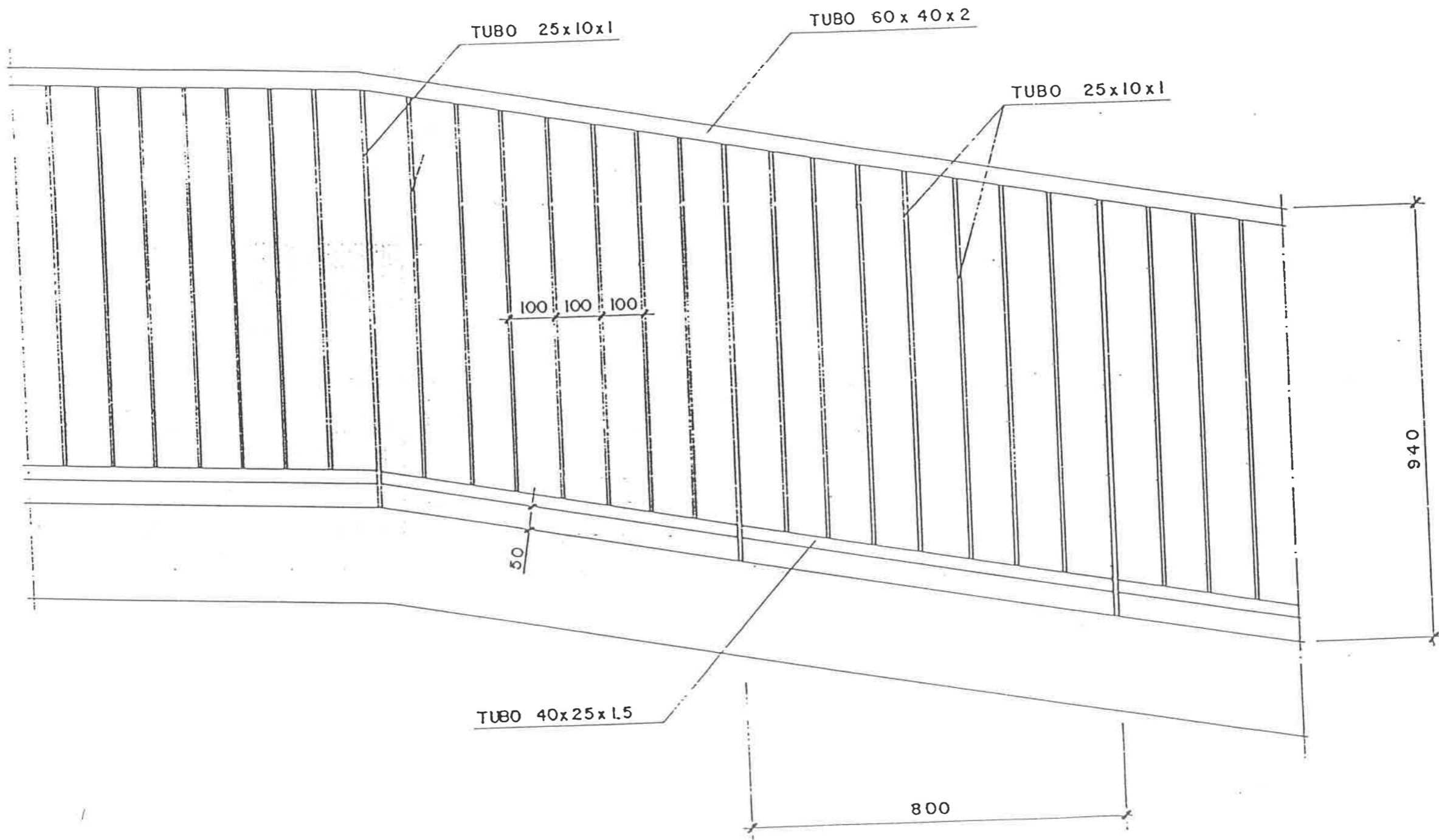


ALZADO BARANDILLA ESCALERAS  
COLEGIO Y MERCADO  
ESCALA. 1:10



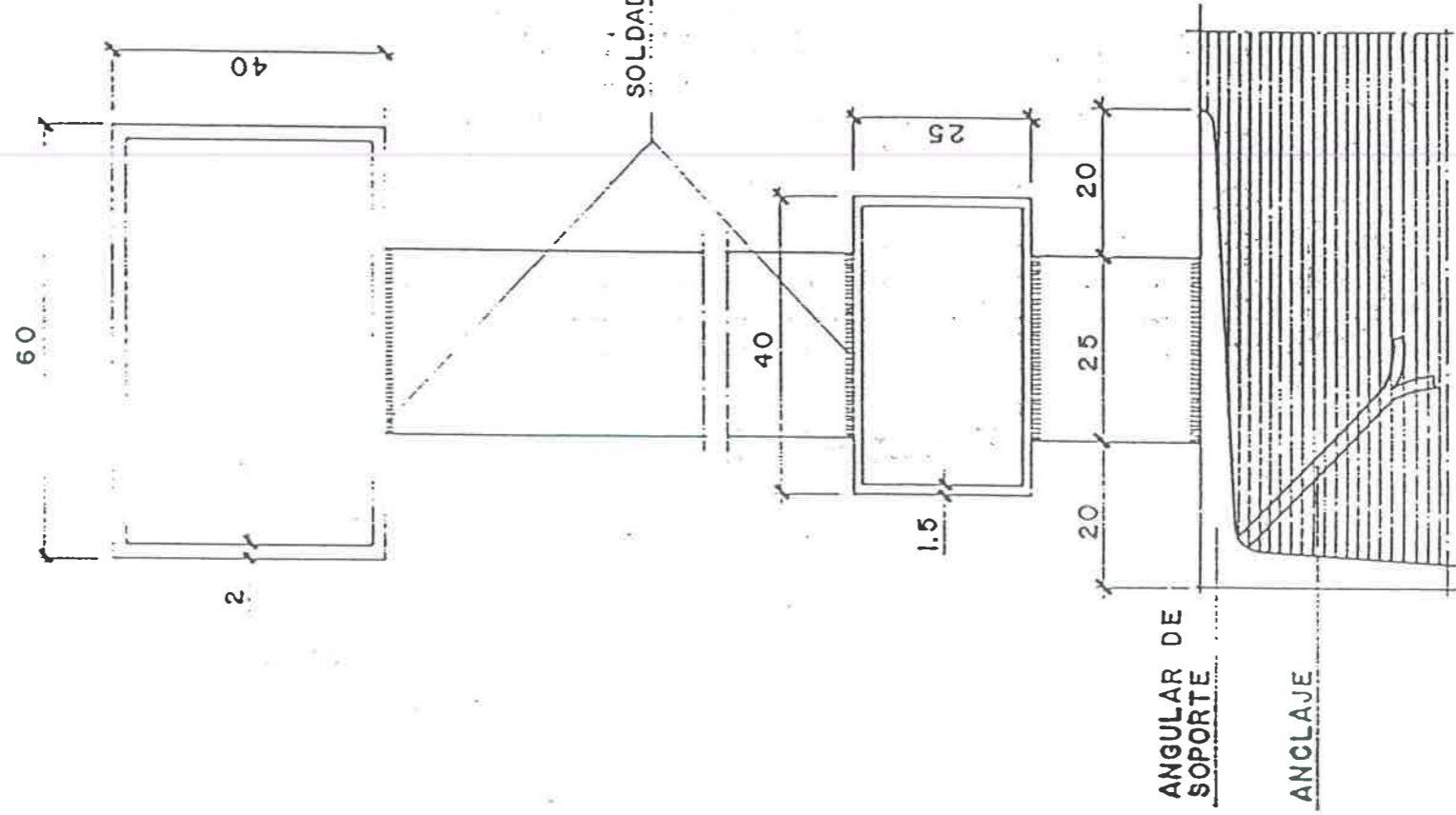


**PERFIL**  
**ESC. 1:1**



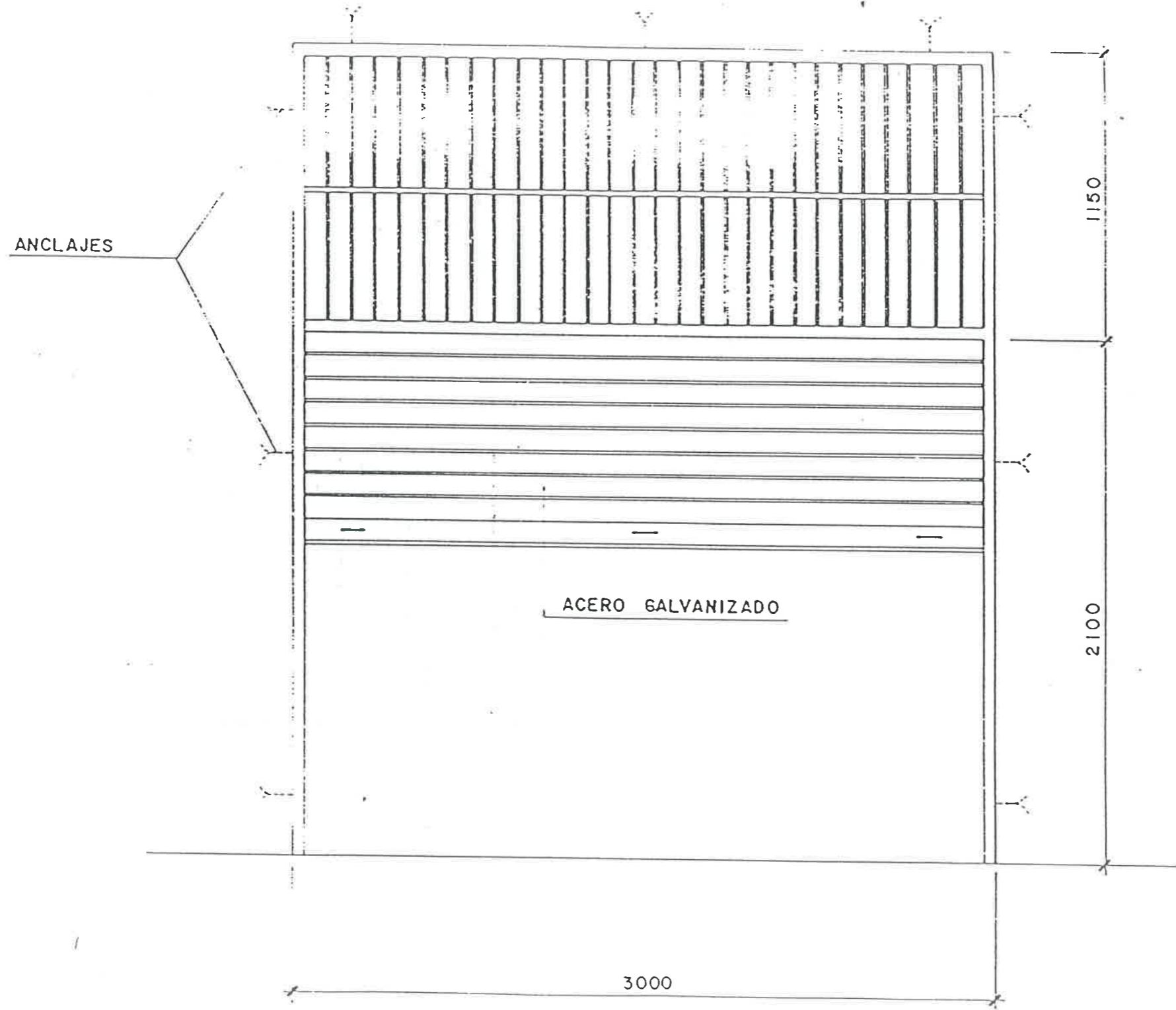
ALZADO BARANDILLA RAMPA  
ESCALA. 1:10



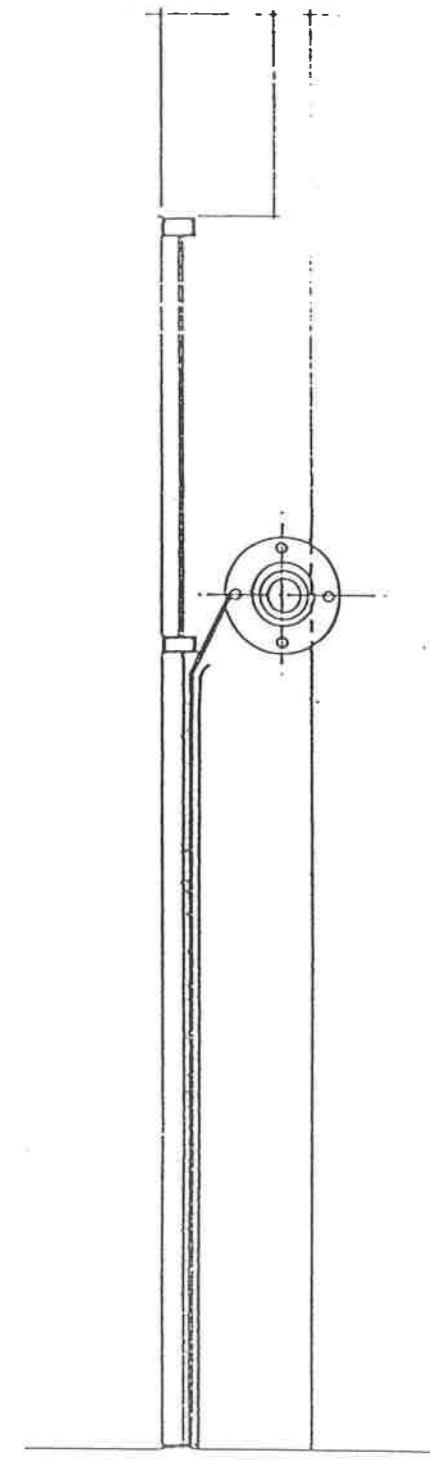


PERFIL  
ESC. 1:1

CIERRE ENROLLABLE ARTICULADO

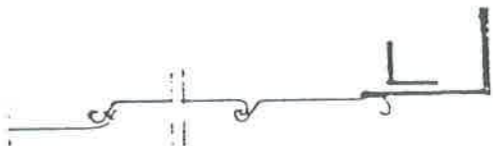


ALZADO  
ESC. 1:20

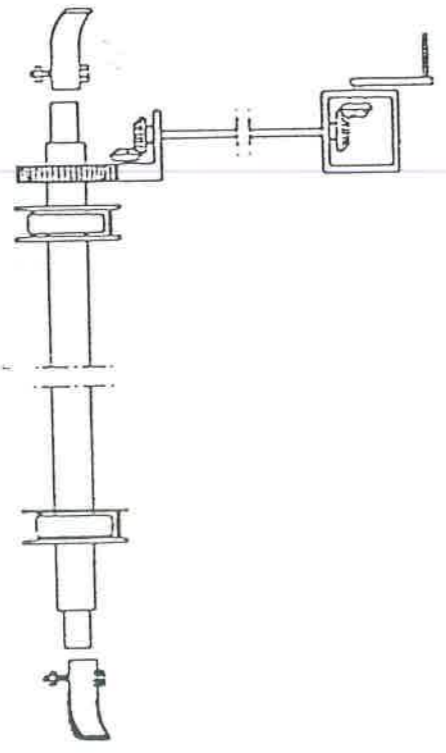


PERFIL  
ESC. 1:20

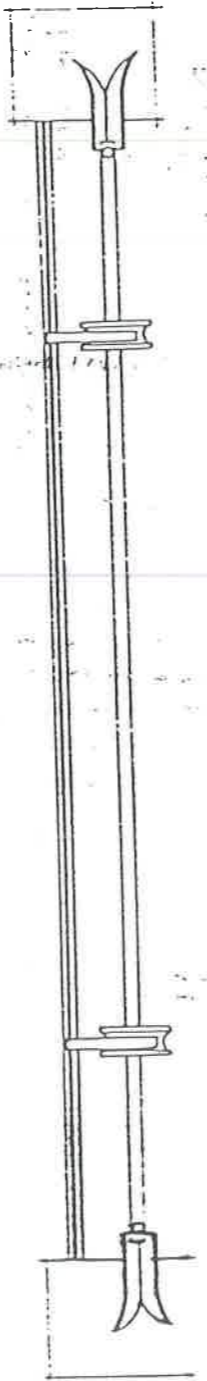
CIERRE EMPUJANTE



SECCION PERSIANA

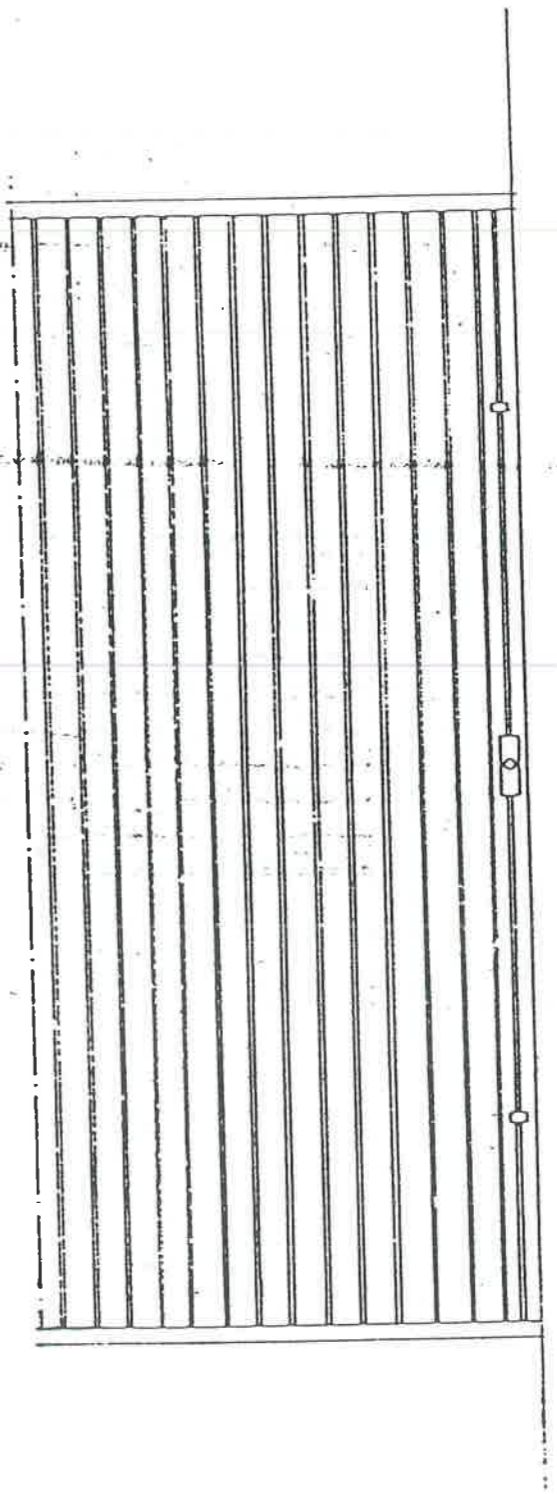


MÉCANISMO ACCIONAMIENTO



SECCION HORIZONTAL

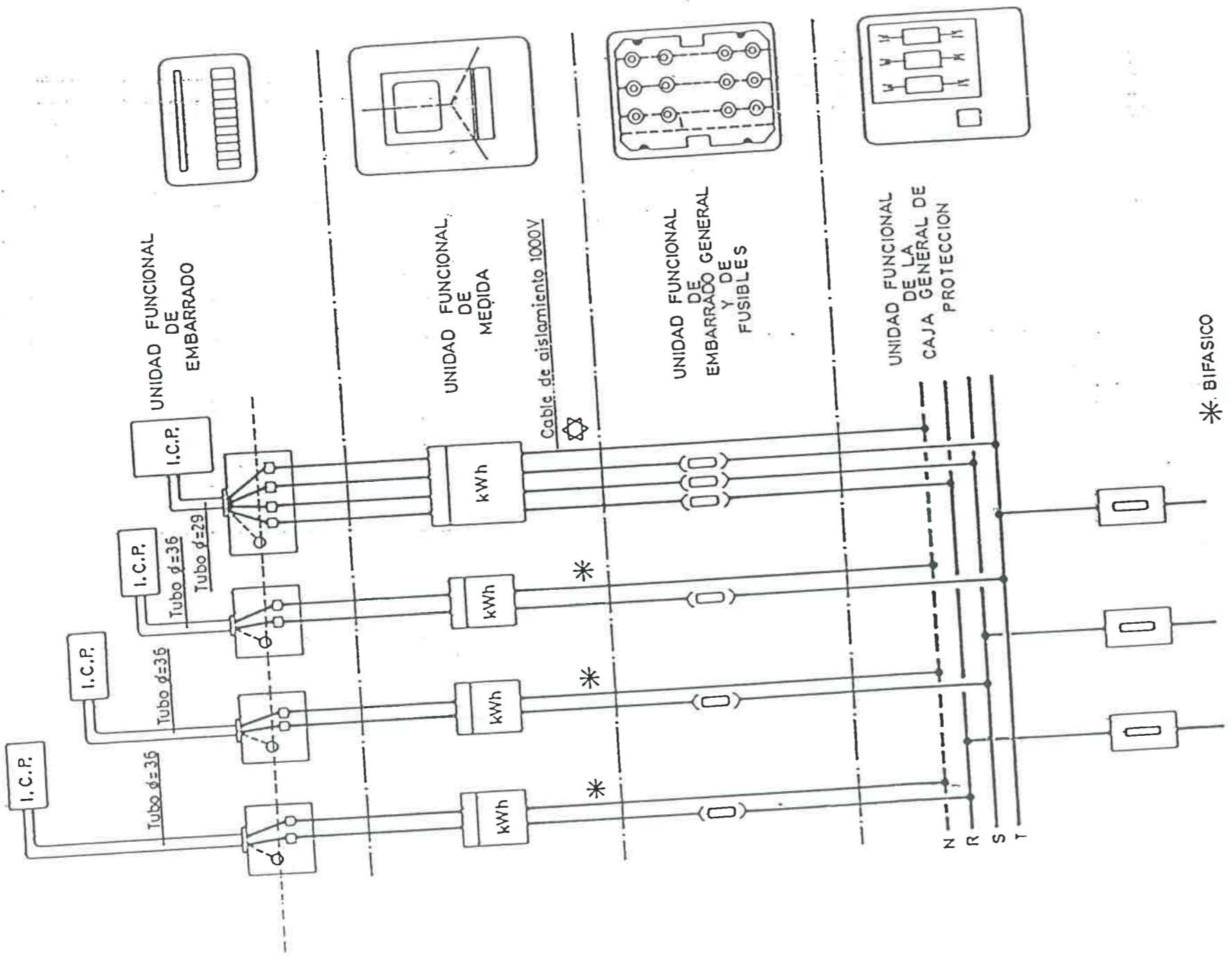
ESC. 1:20



ALZADO TRASERO

ESC. 1:20

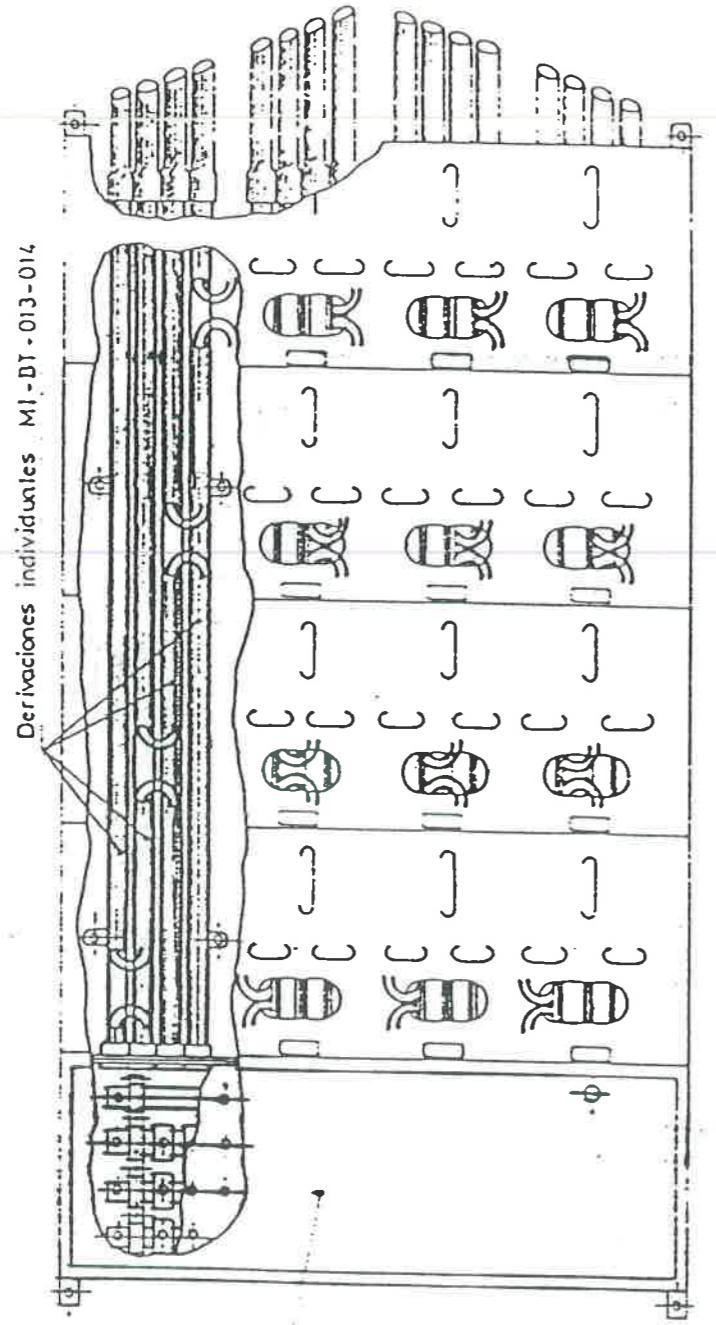
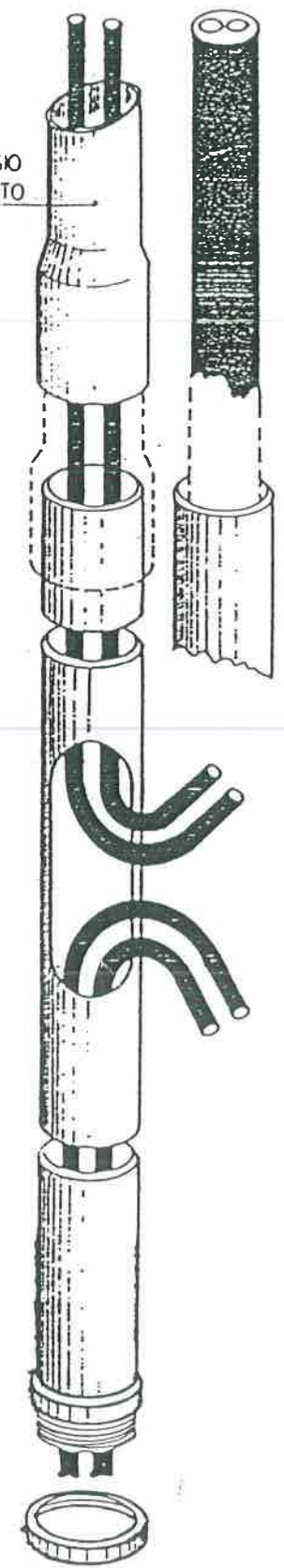




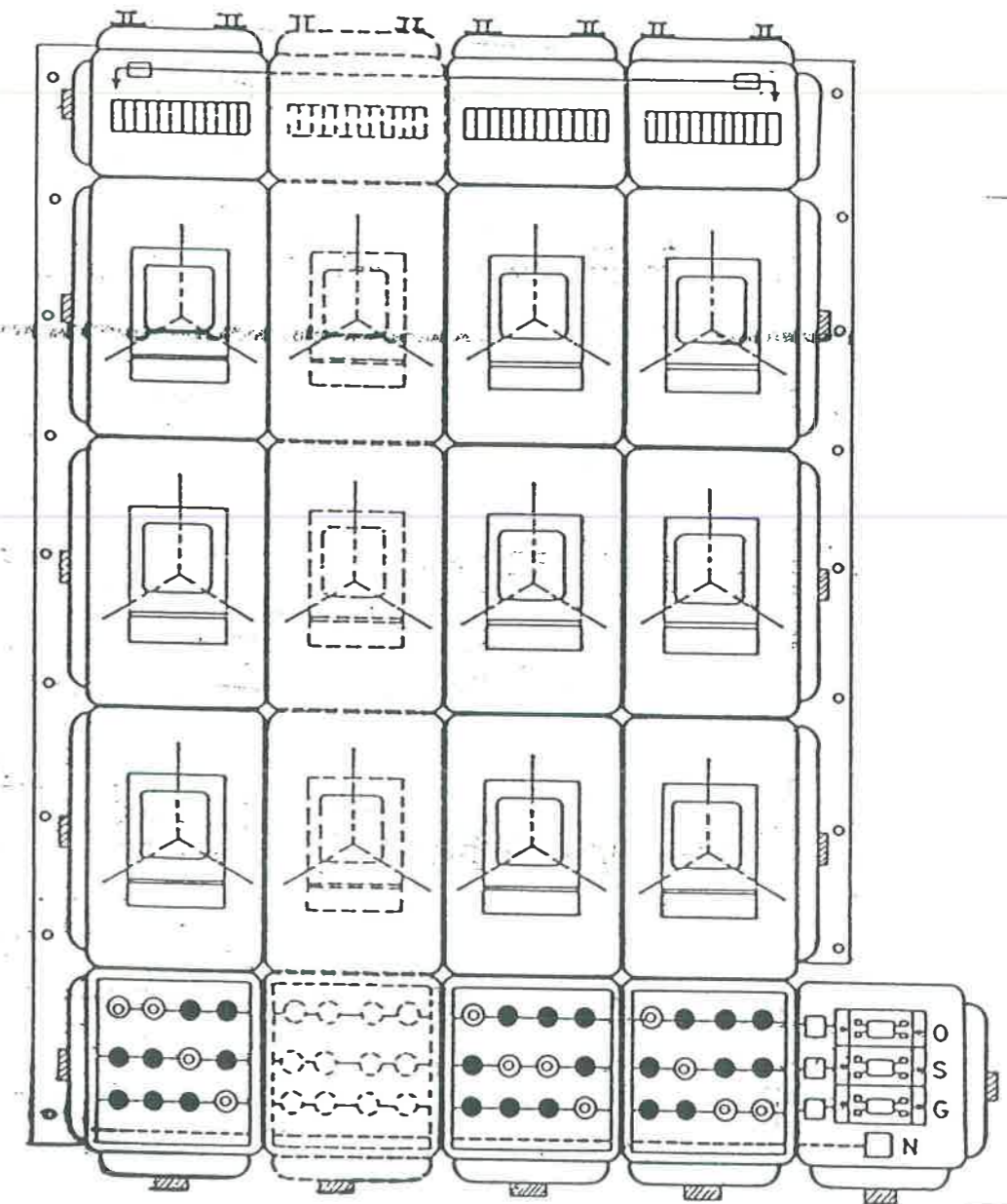
\* BIFASICO  
☆ TRIFASICO

ESQUEMA UNIFILAR

bo procedente de COLEGIO  
ERCADO O APARCAMIENTO



Caja de embarrado general y fusibles M2-BT-013

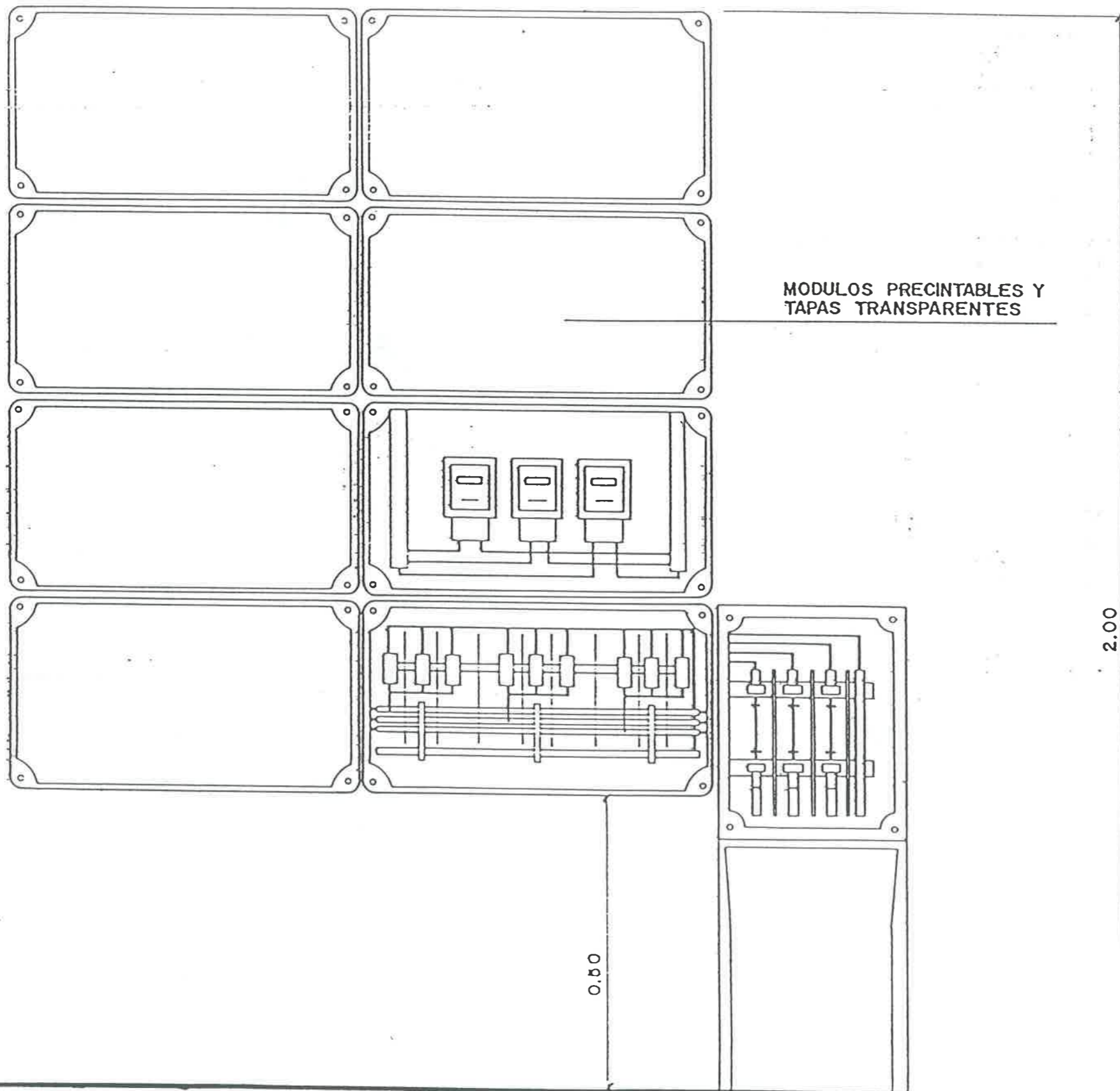


nivel del suelo

altura mínima 0,50

altura máxima 1,80

# DETALLE CENTRALIZACION DE CONTADORES



MODULOS PRECINTABLES Y  
TAPAS TRANSPARENTES

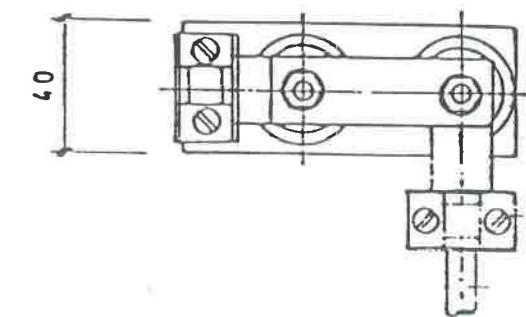
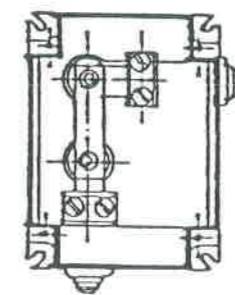
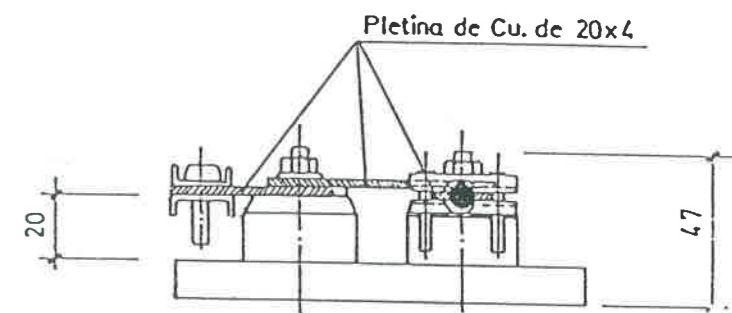
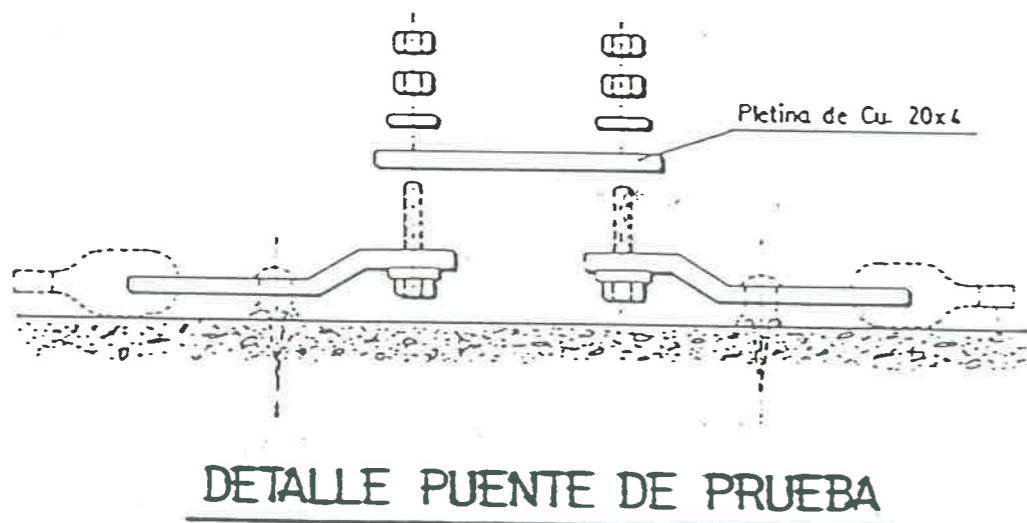
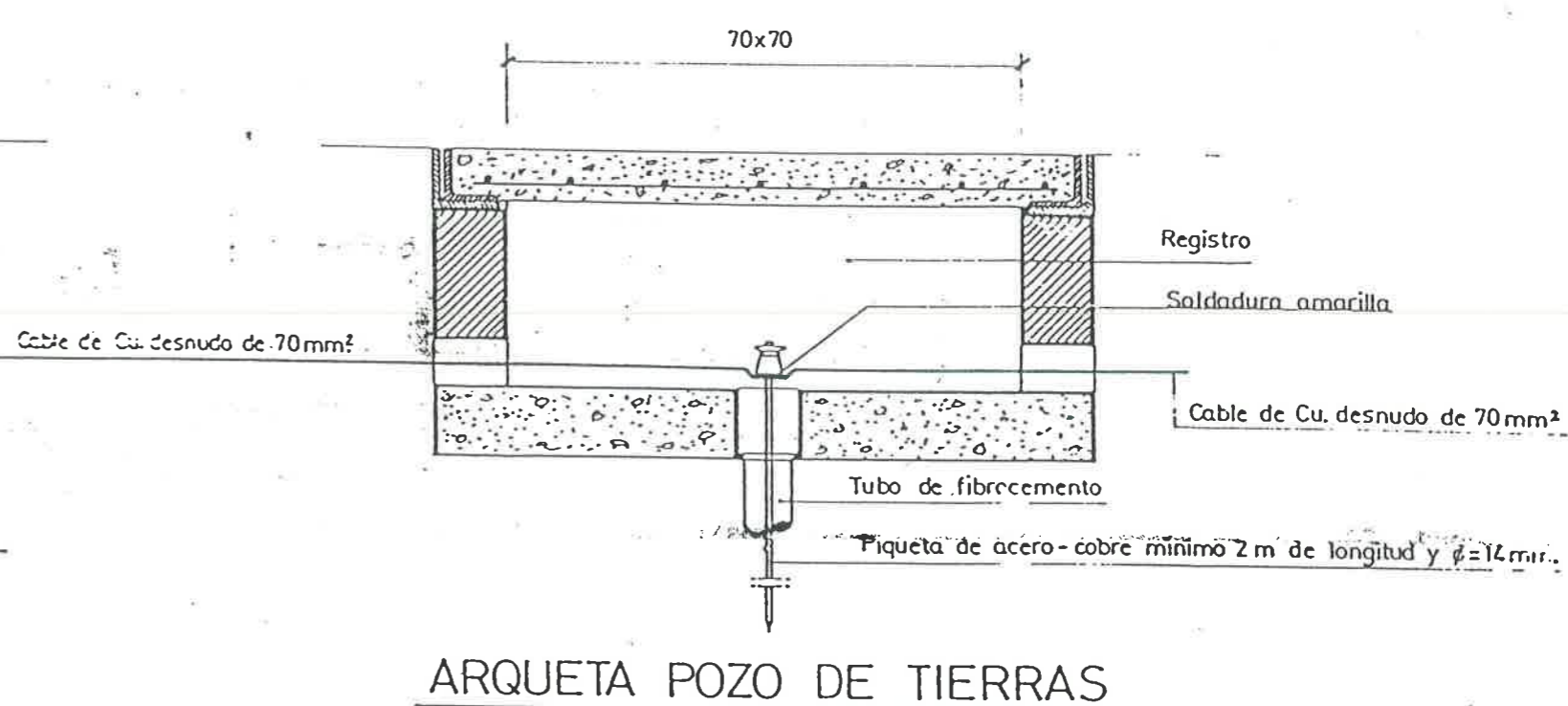
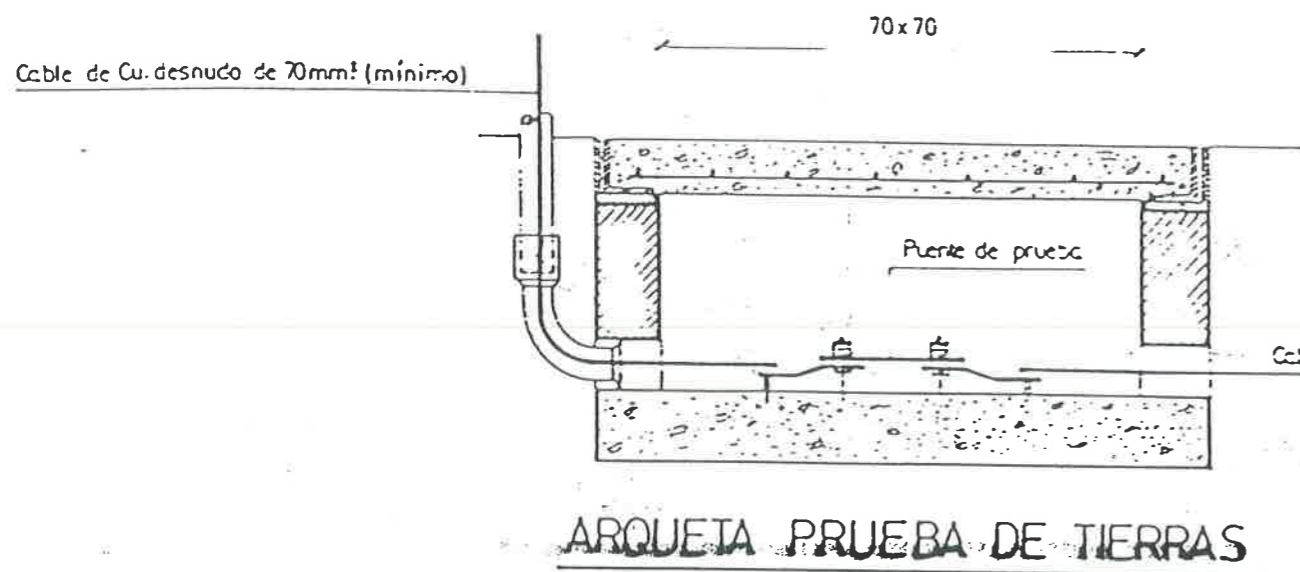
2.00

0.50

MODULO BATERIA  
DE CONTADORES

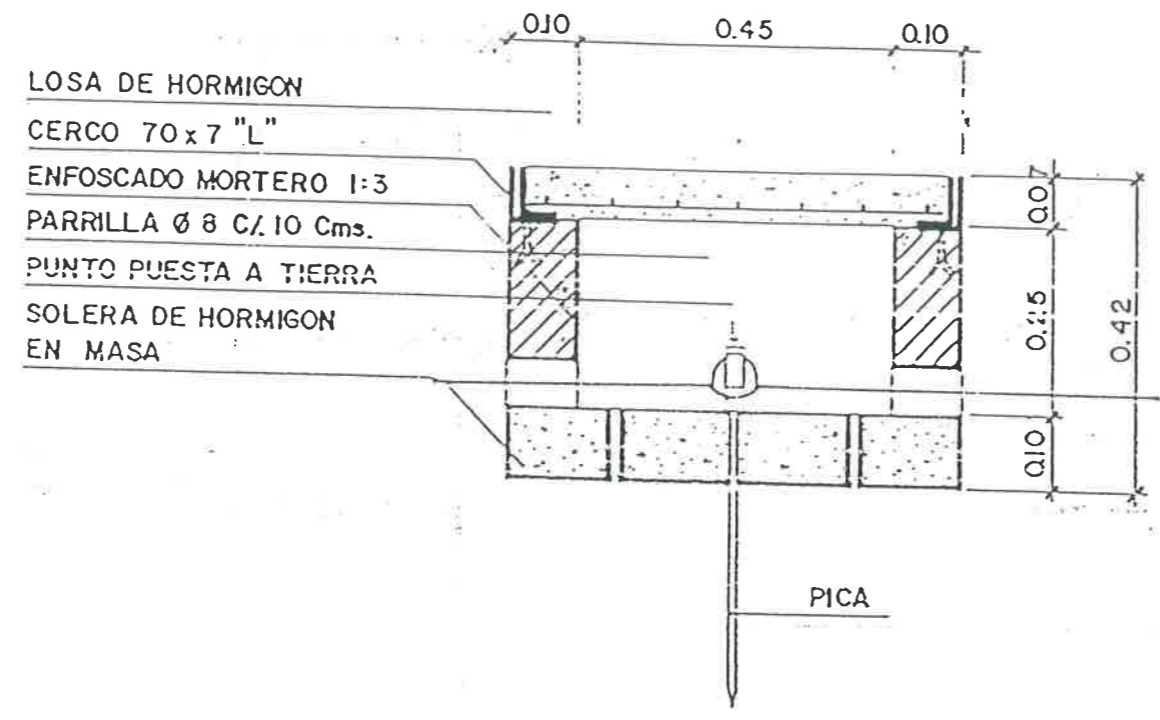
ESCALA. 1:10



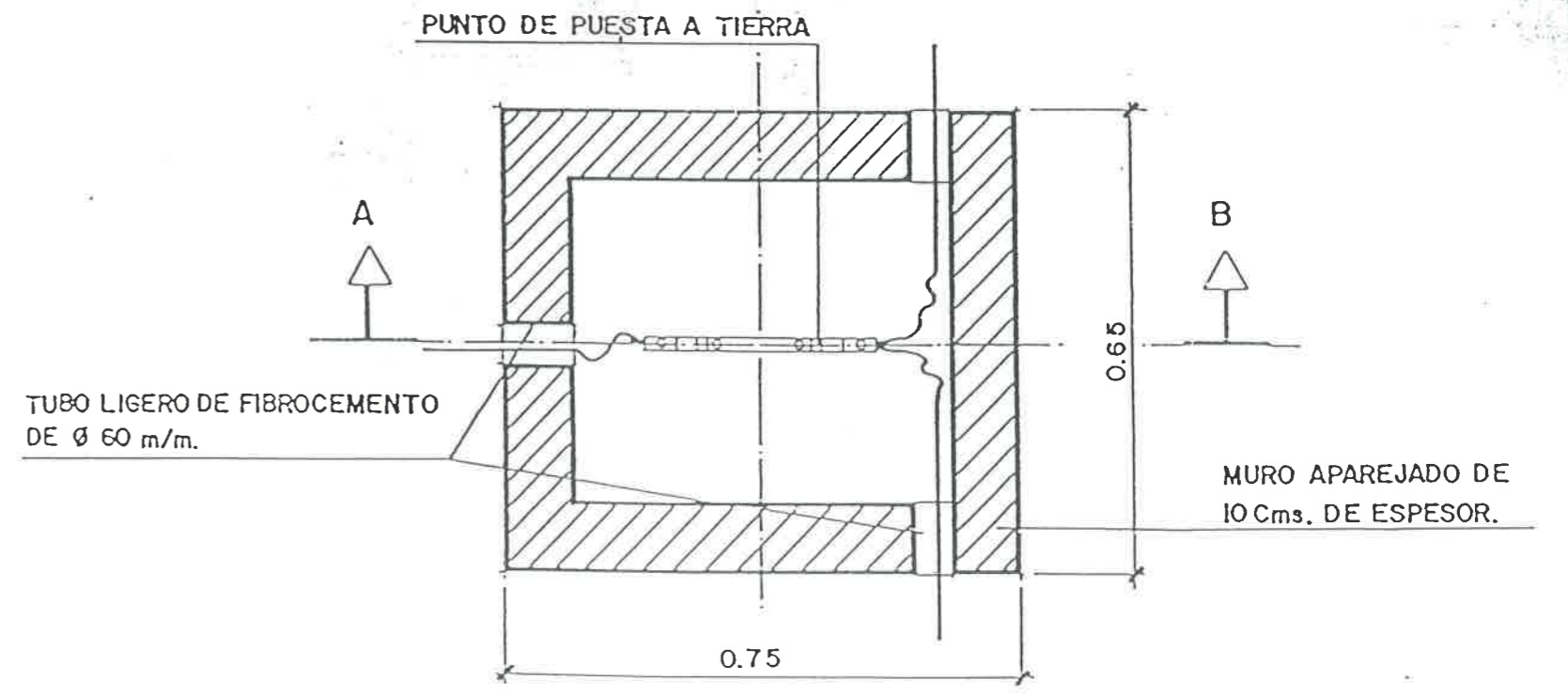
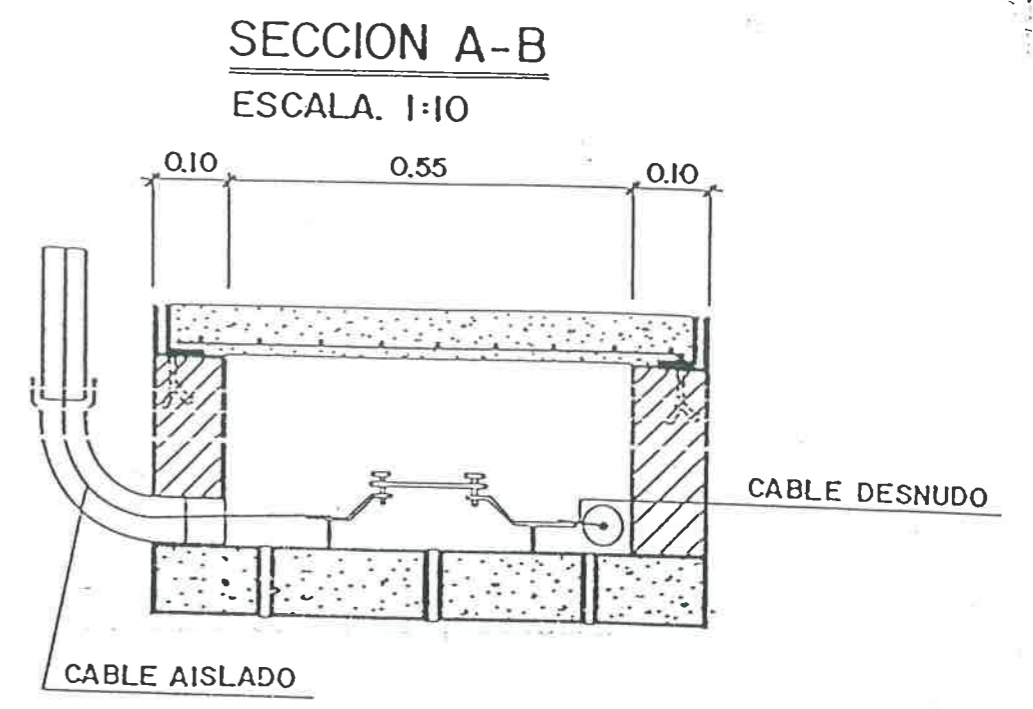


Borna hasta 70mm<sup>2</sup>  
Cable de Cu. desnuc

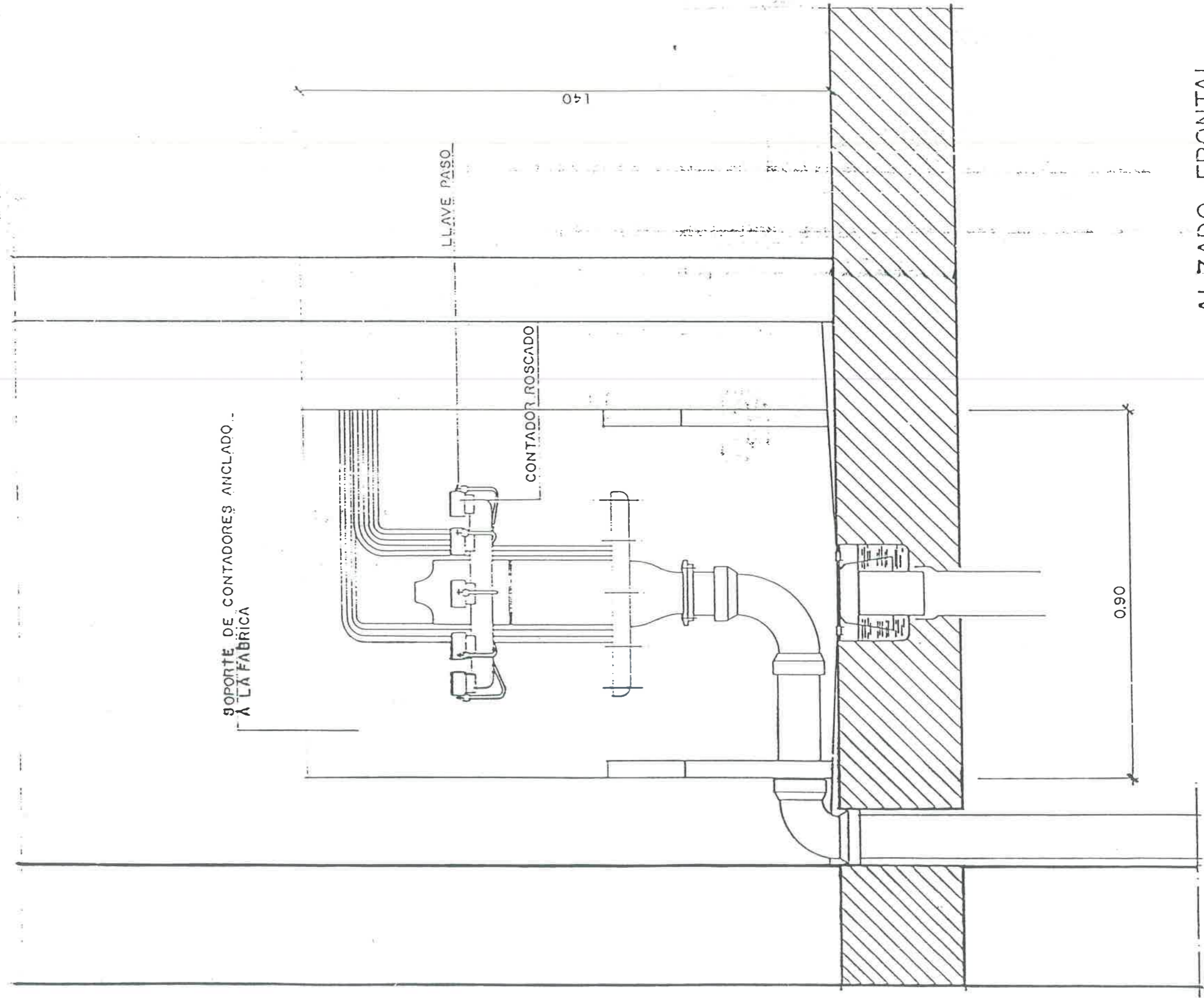
CAJA DE CONEXION DE TIERRAS



**SECCION ARQUETA PICA**  
 ESCALA. 1:10



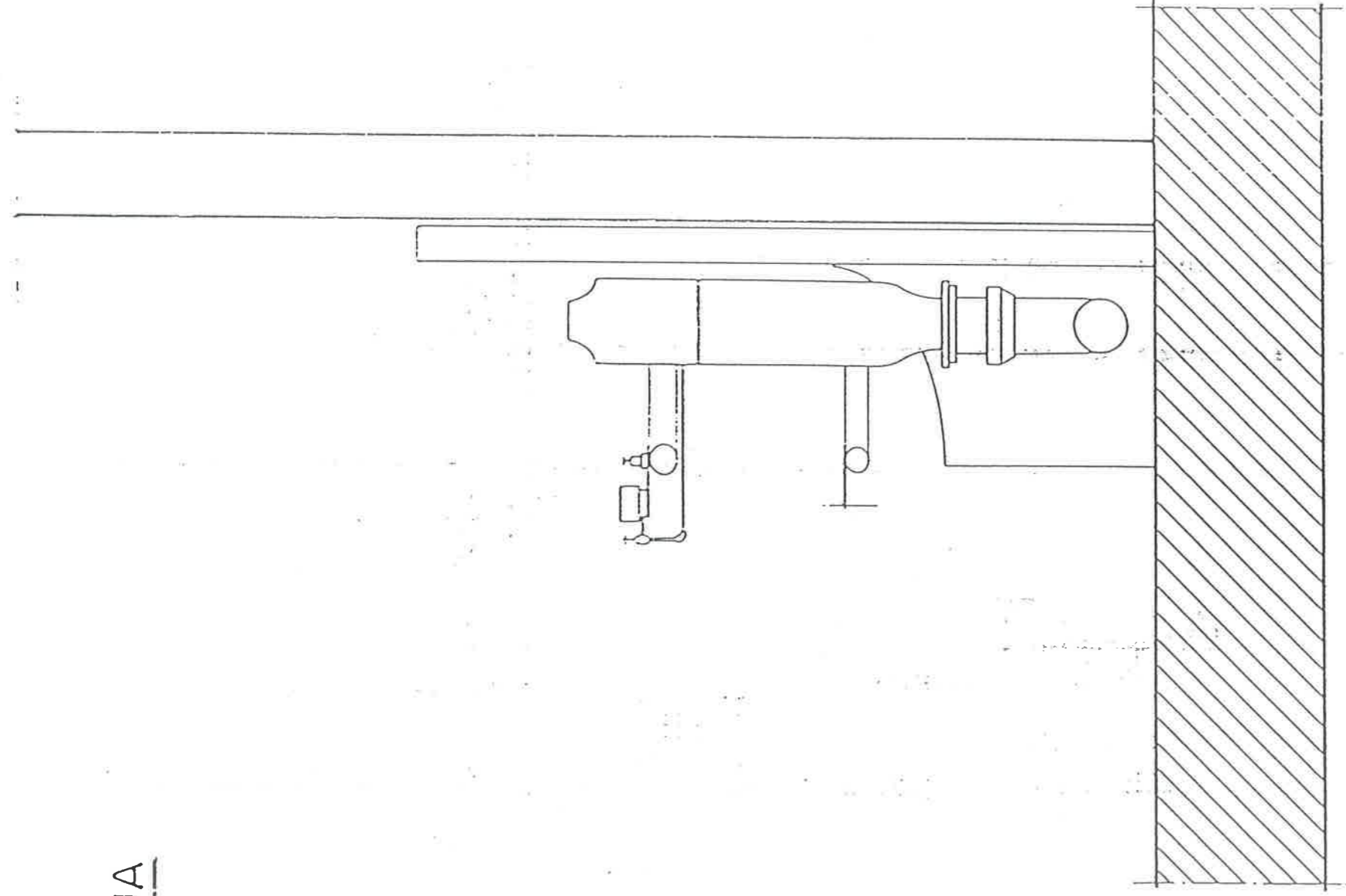
**PLANTA ARQUETA DE CONEXION**  
 ESCALA. 1:10



**ALZADO FRONTAL**  
 ESC. 1:10



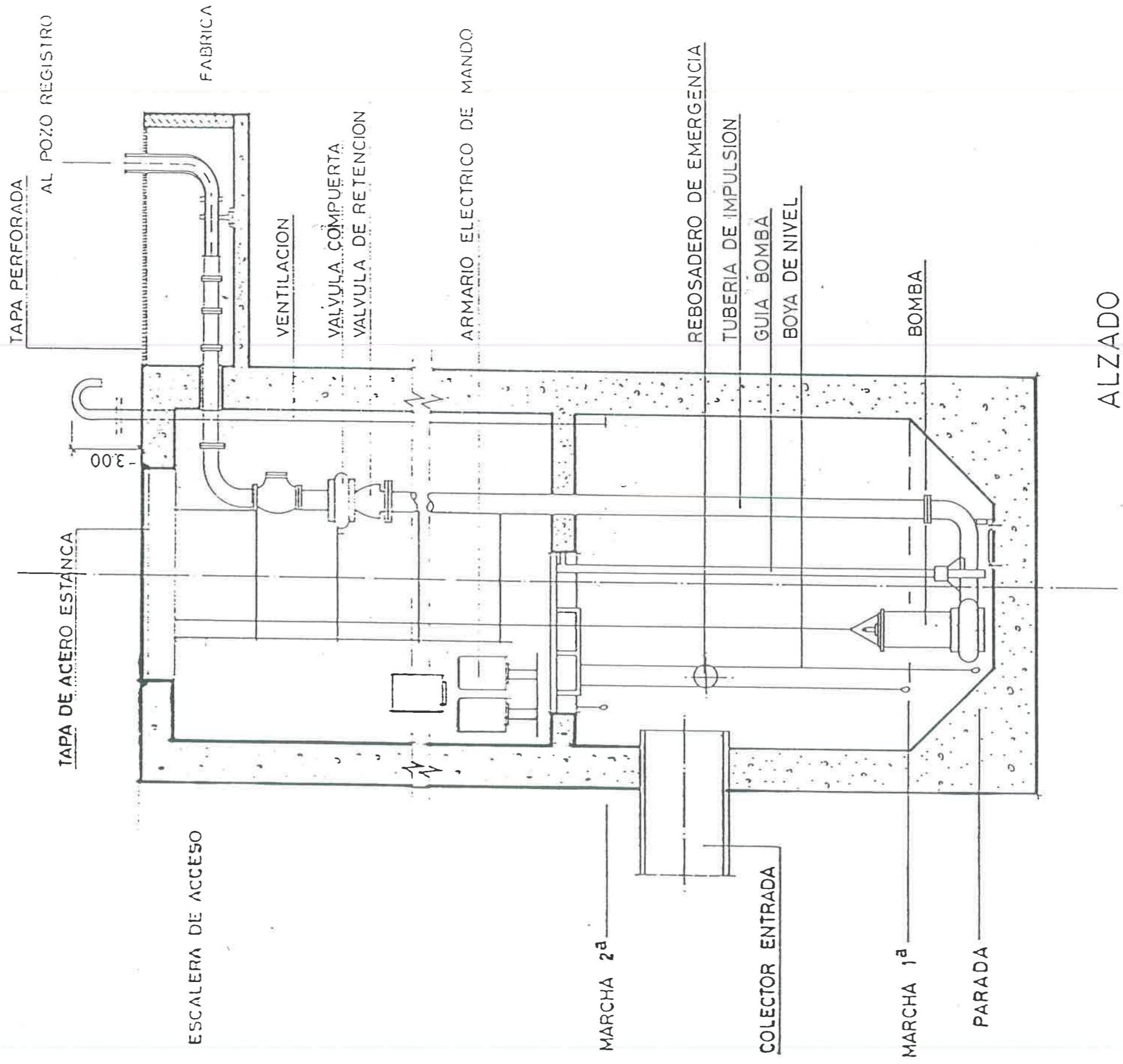
BATERIA AGUA

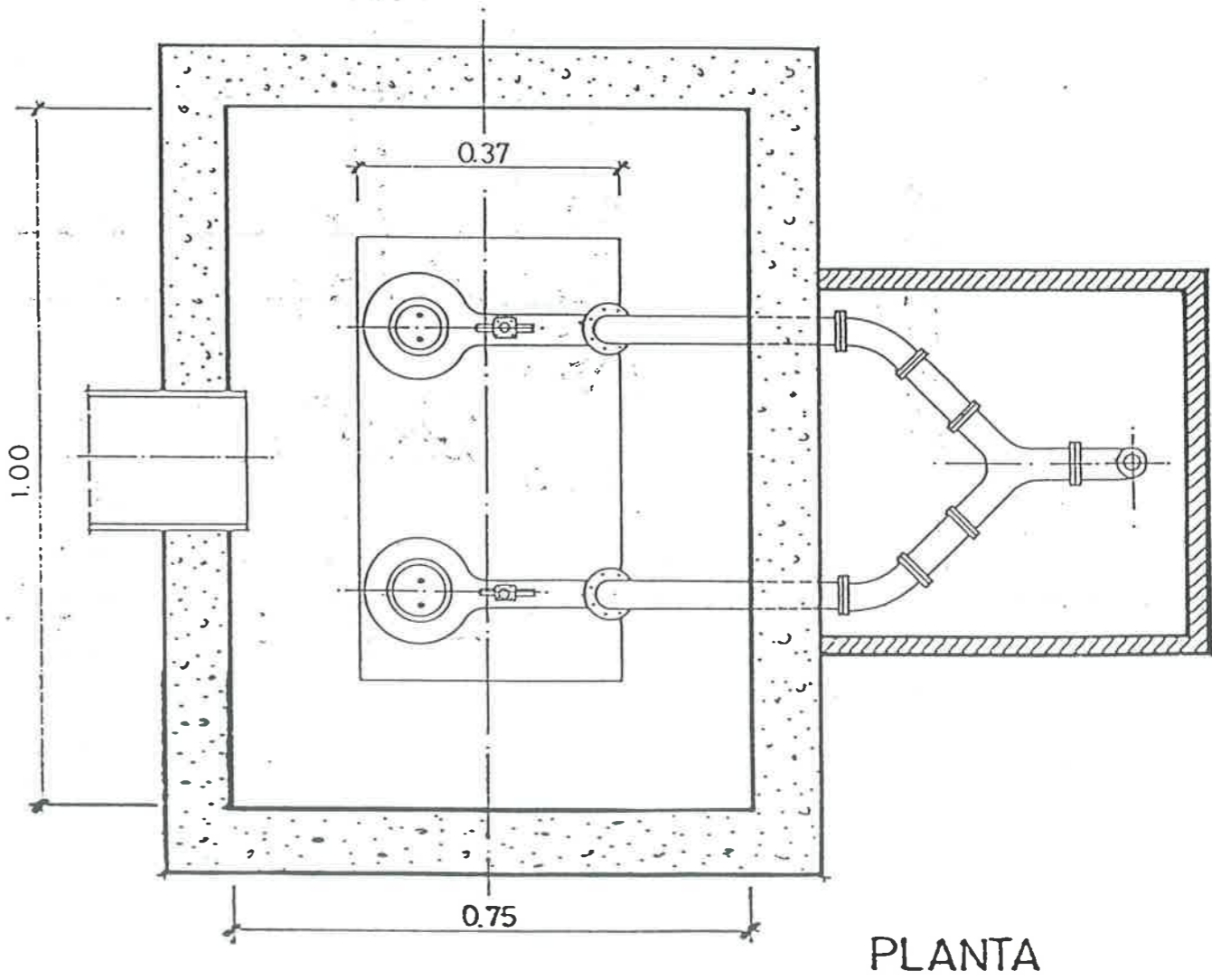
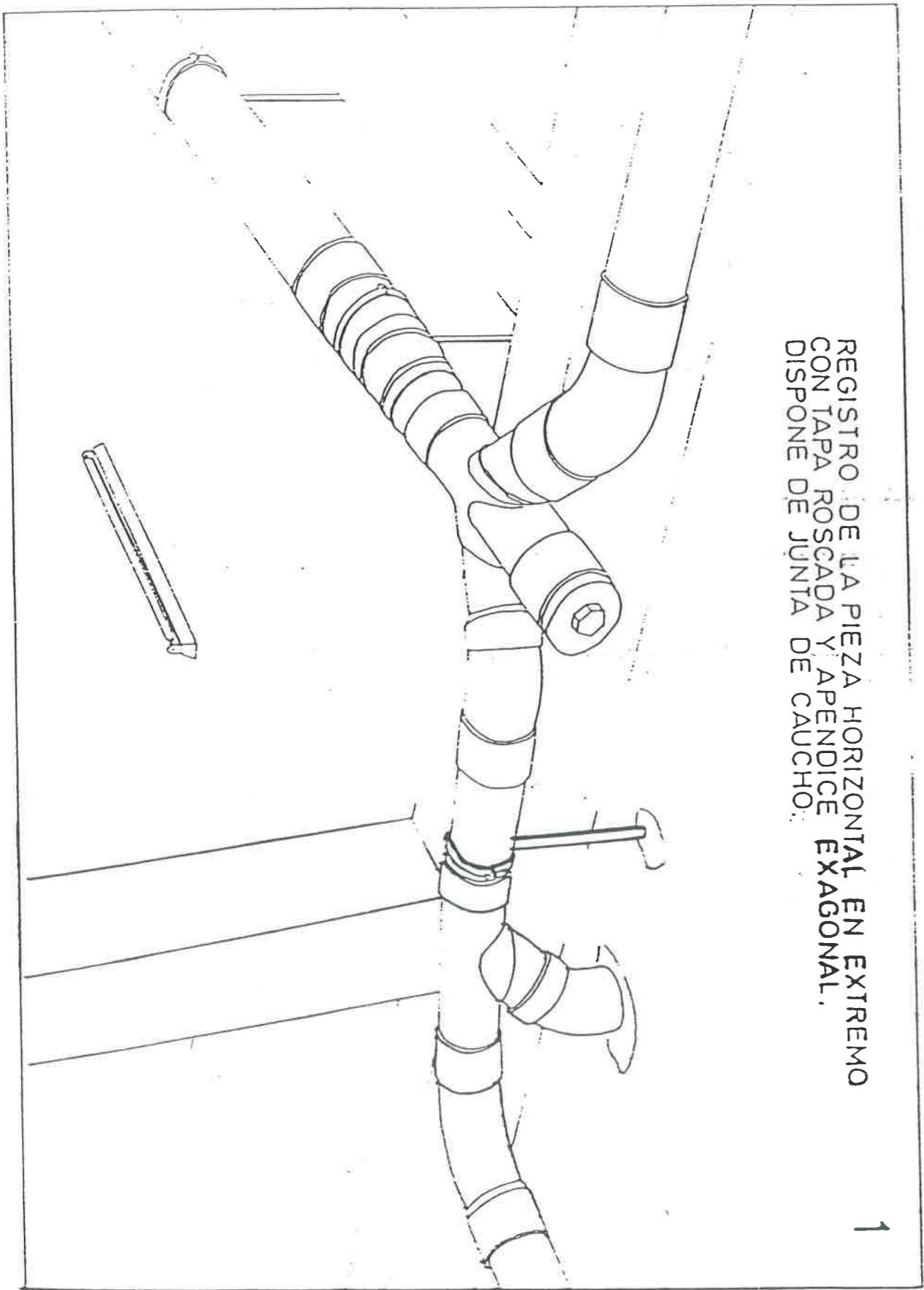


PERFIL  
ESC. 1:10

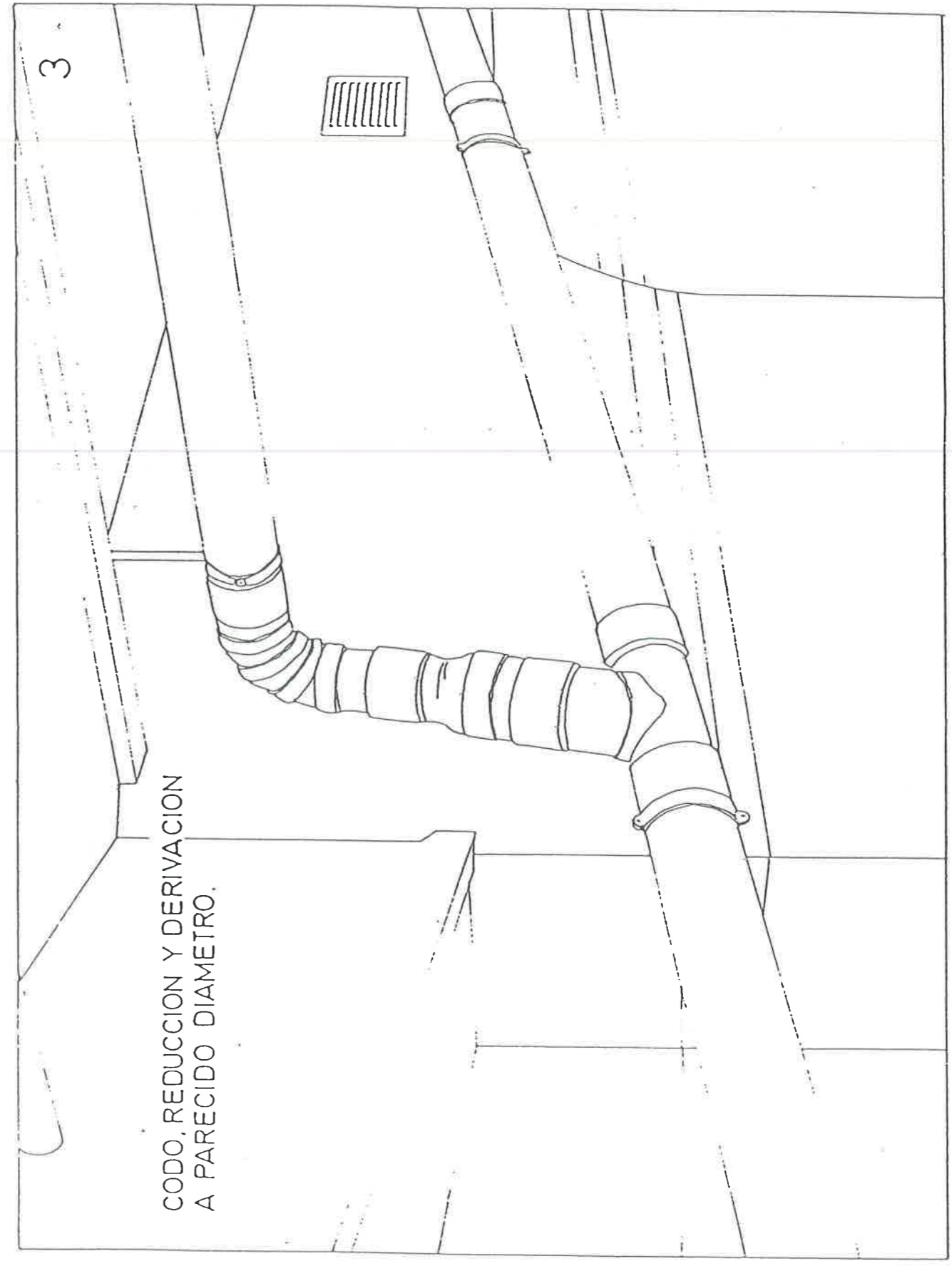
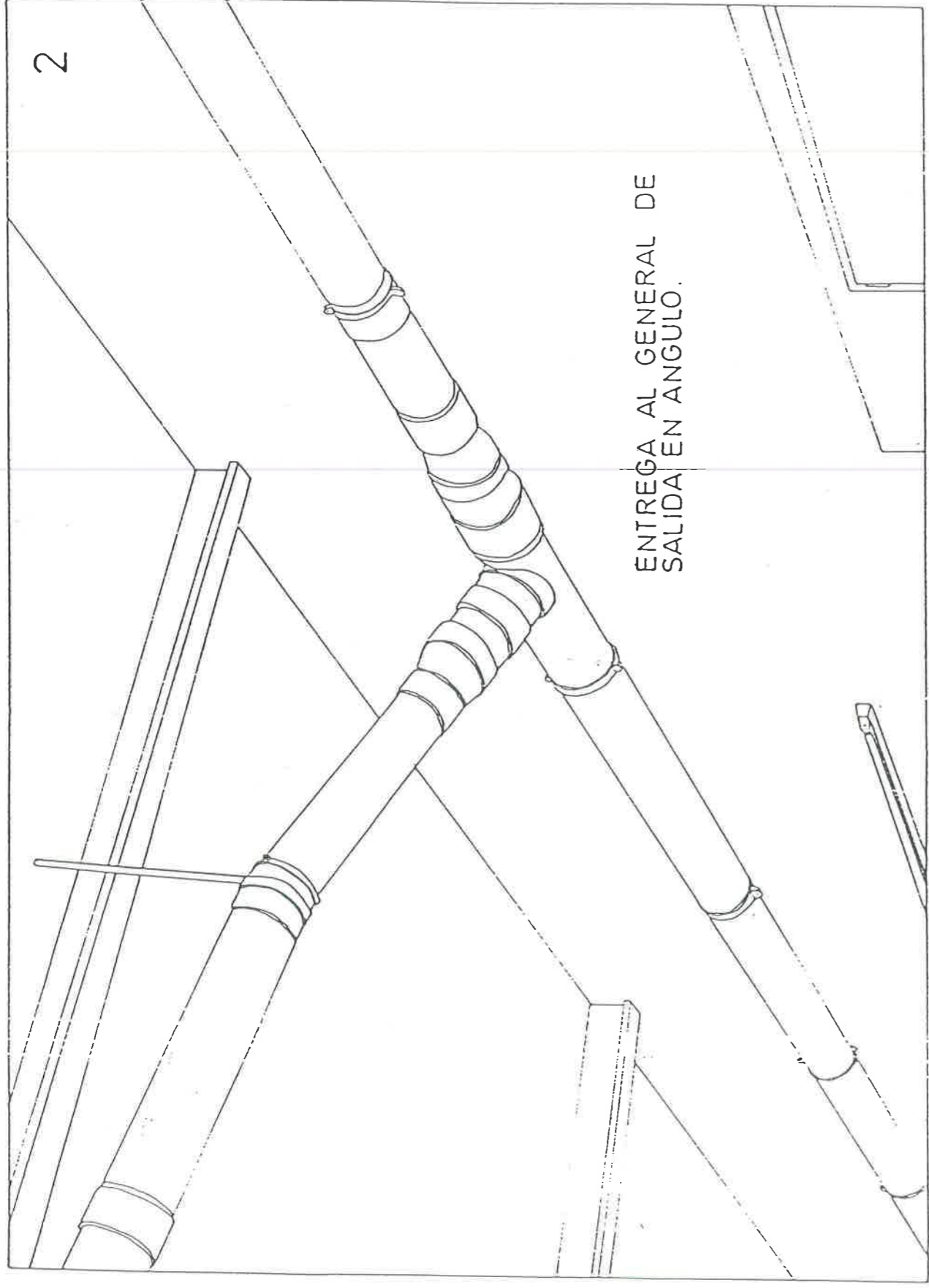
POZO BOMBEO AGUAS RESIDUALES

ESCALA. 1:10

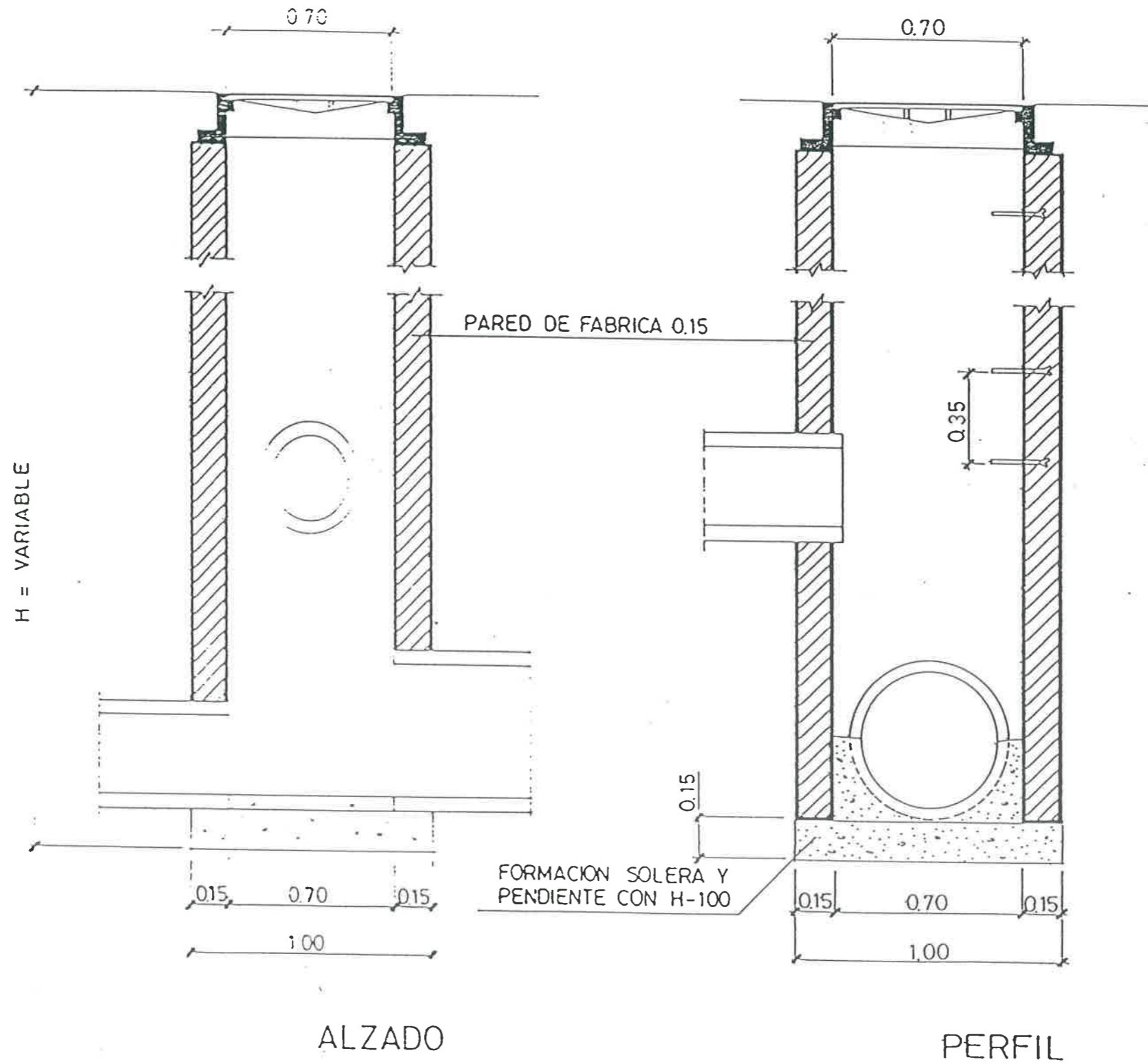






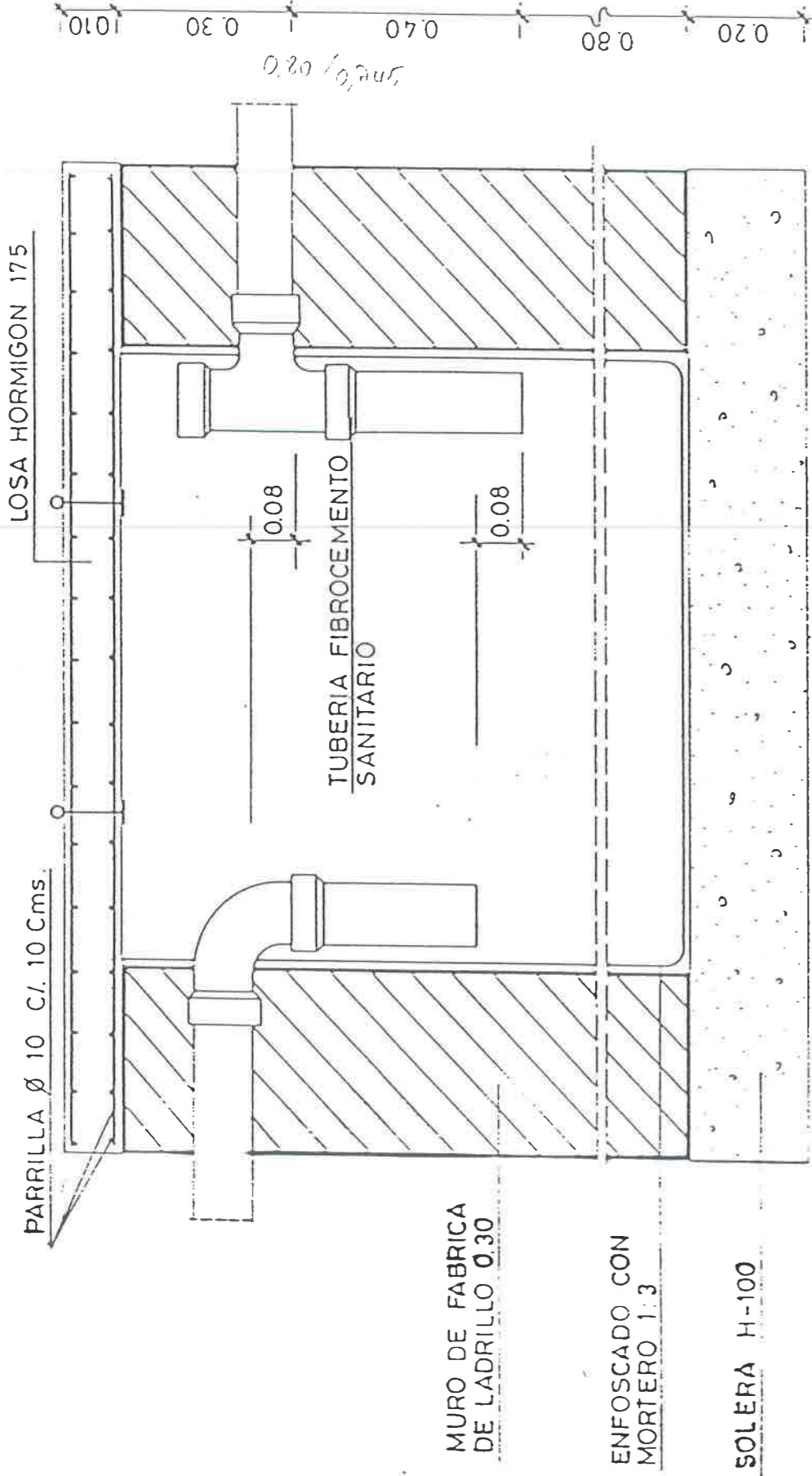


POZO DE REGISTRO  
ESCALA 1 20

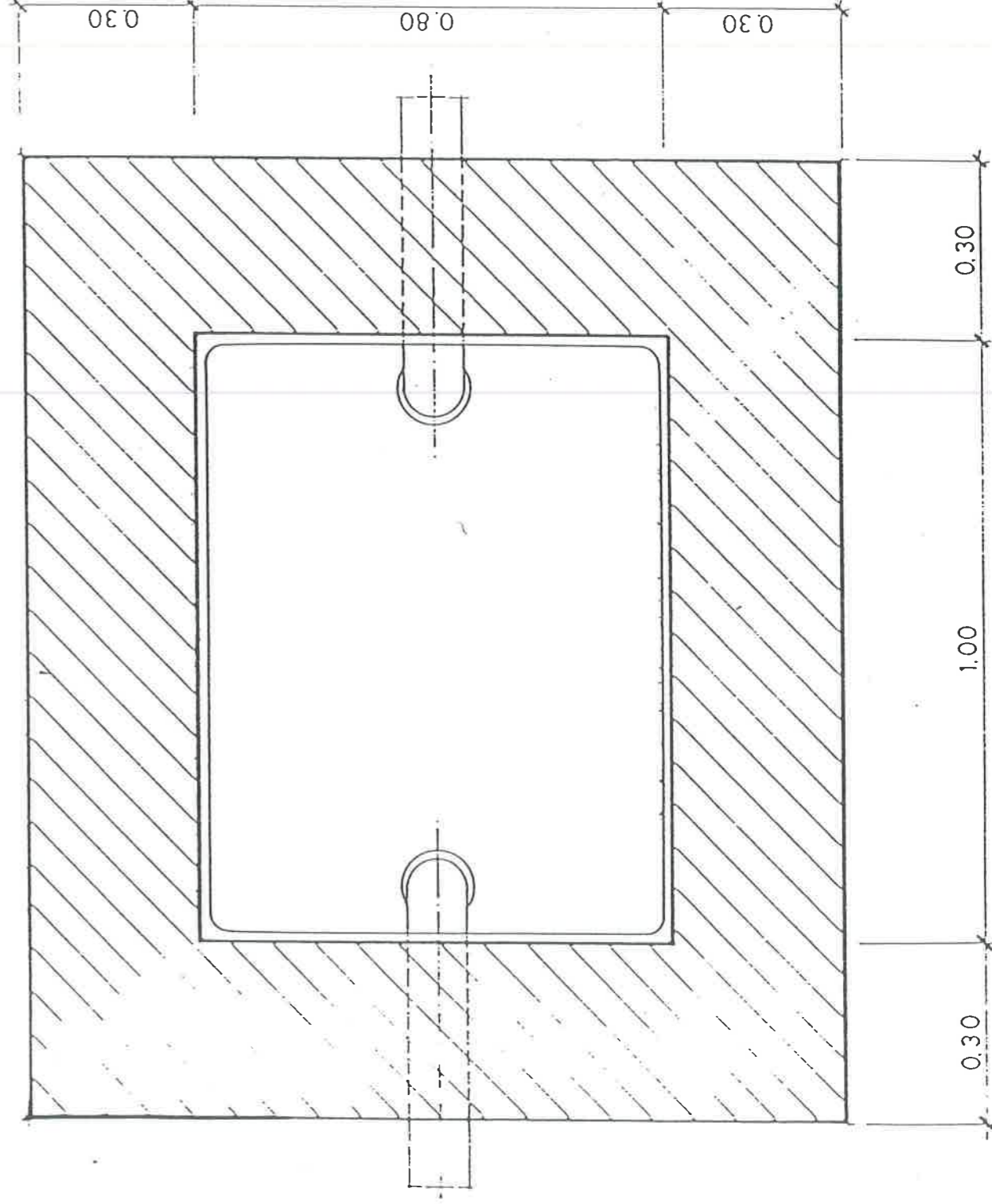


# SEPARADOR DE GRASAS Y FANGOS

ESCALA 1:10



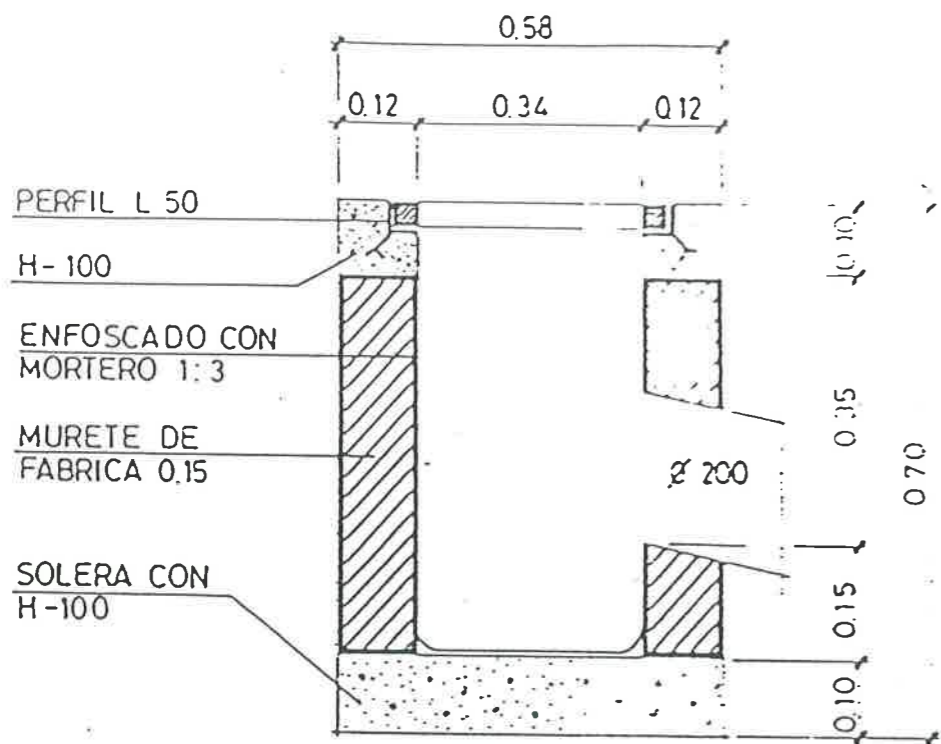
## ALZADO



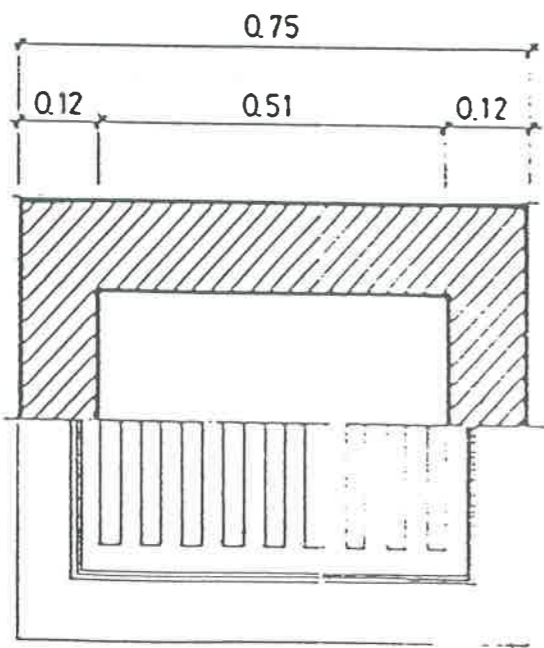
## PLANTA



### SUMIDERO ESC. 1:10

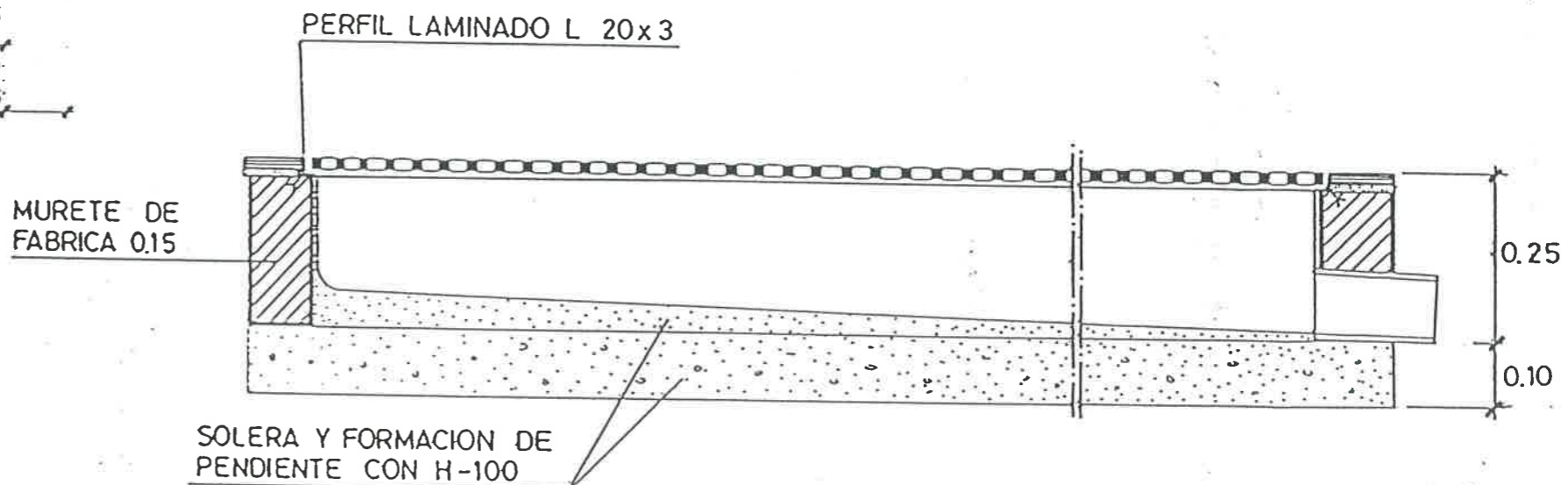


ALZADO

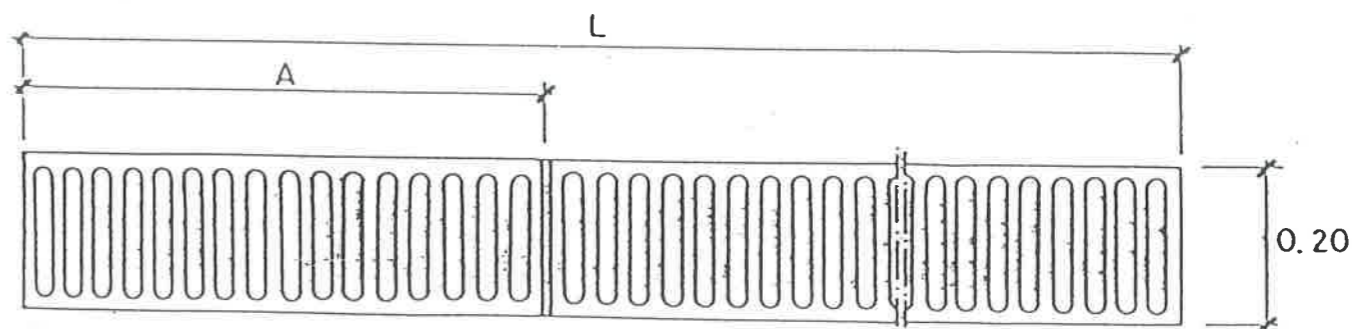


PLANTA

### ARQUETA SUMIDERO ESCALA 1:10

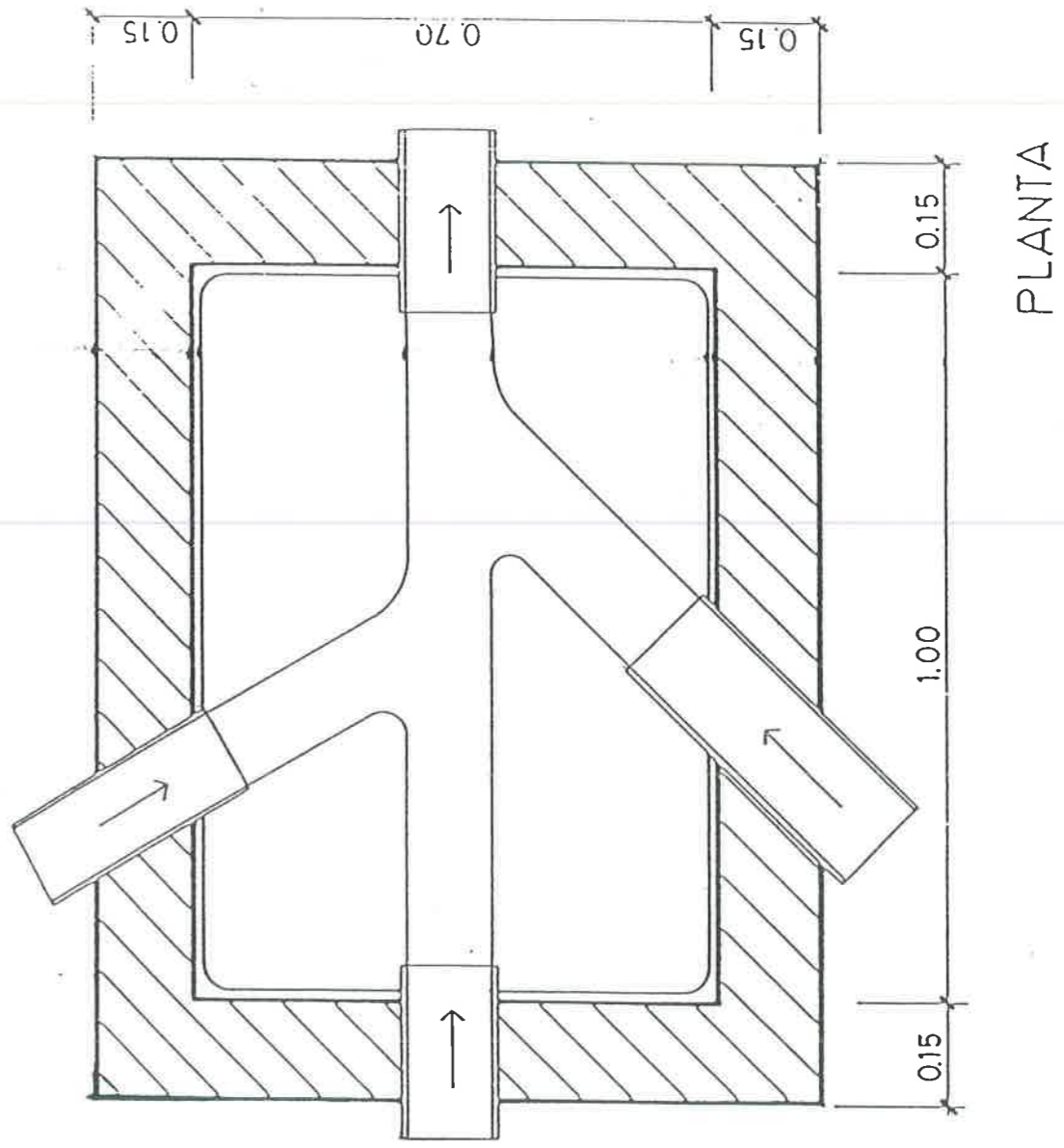
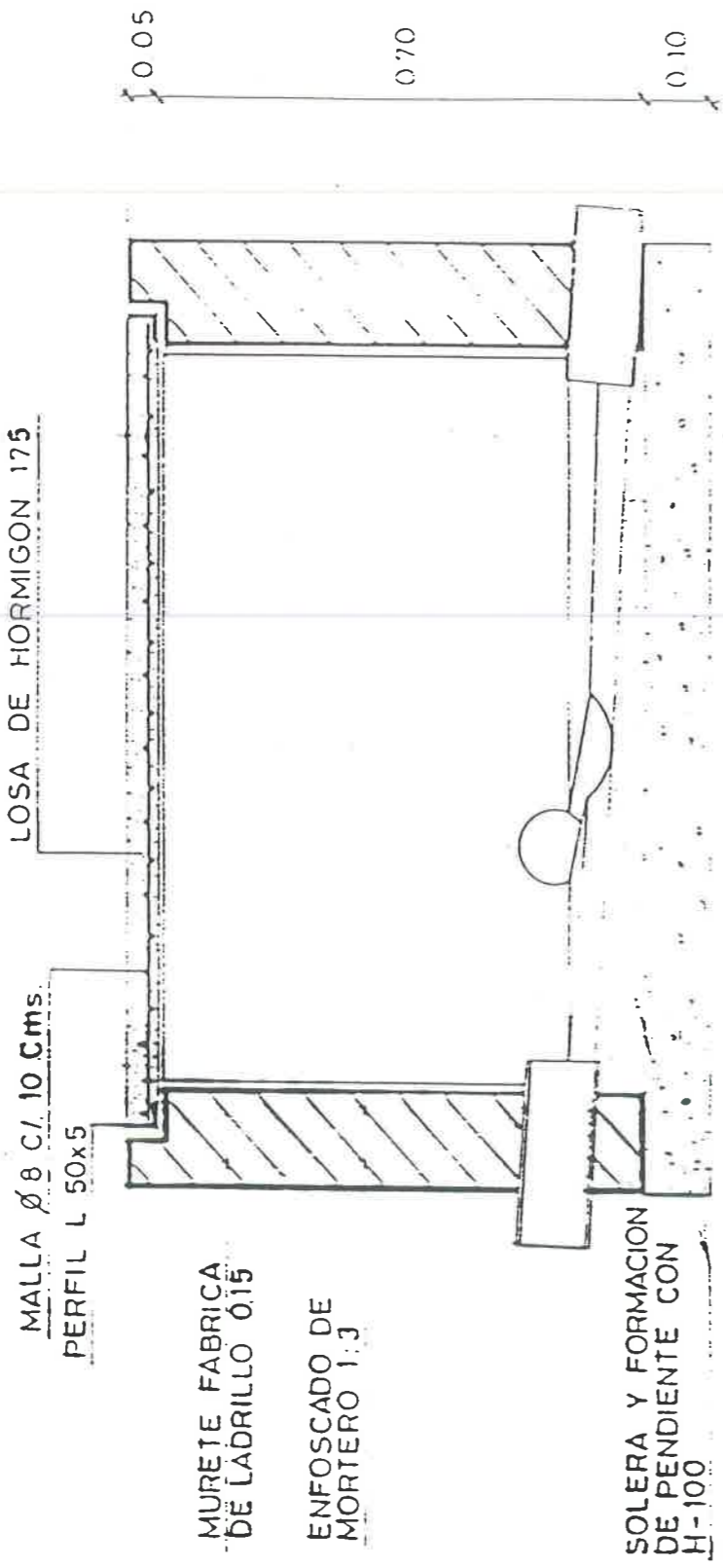


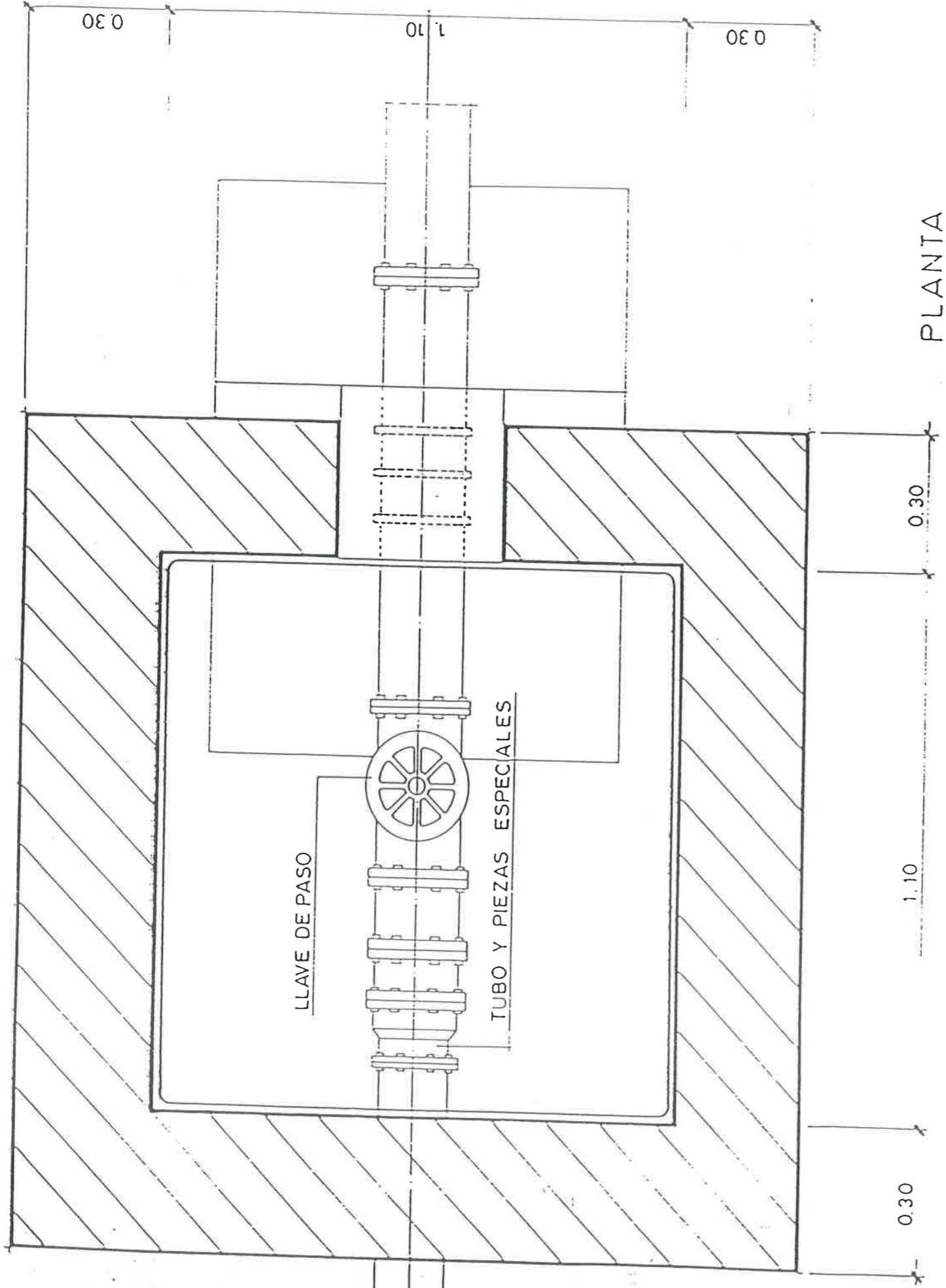
ALZADO



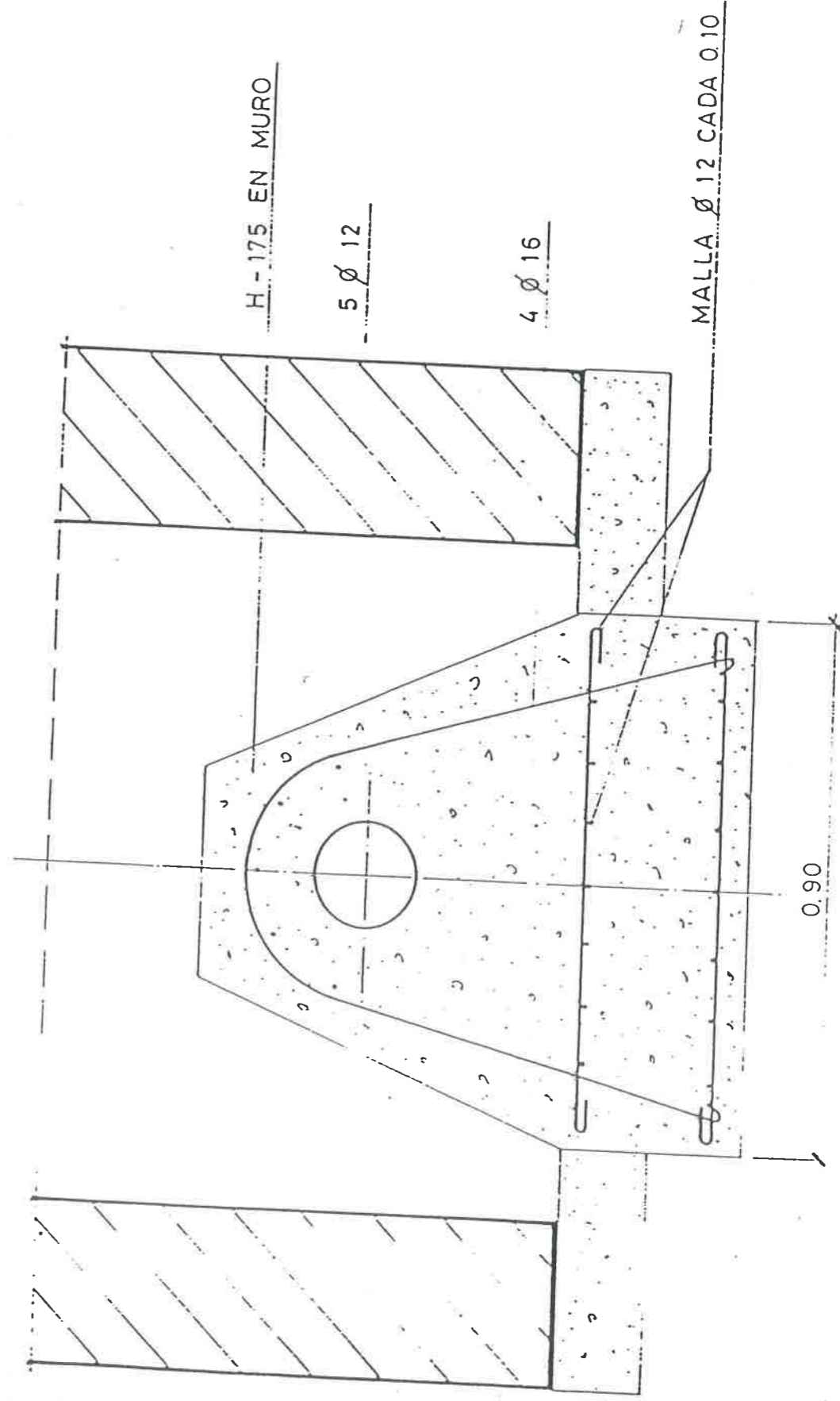
PLANTA

ARQUETA DE PASO  
ESCALA 1:10



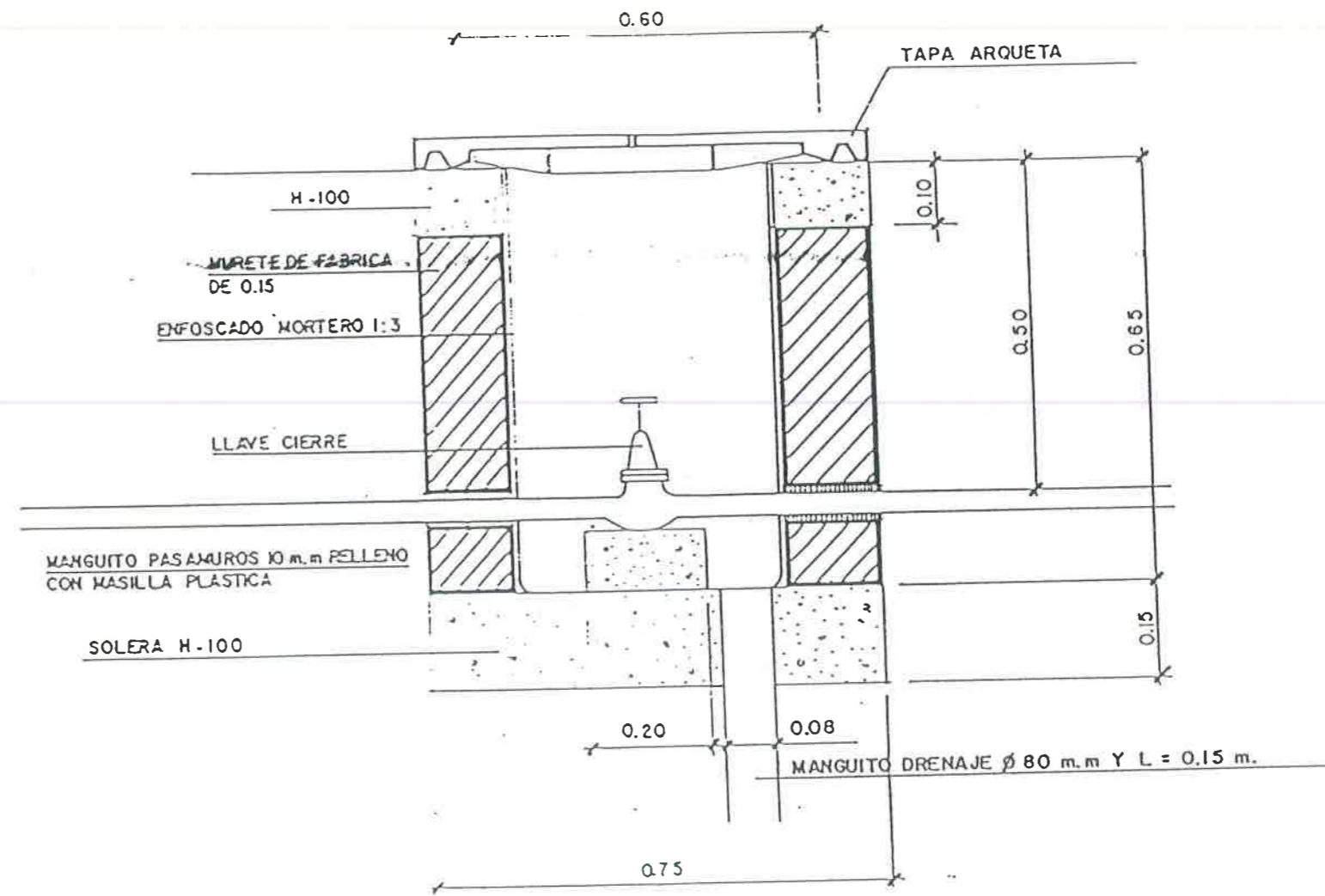


PLANTA



PERFIL





**ARQUETA ACOMETIDA GAS**  
**ESC. 1:10**



