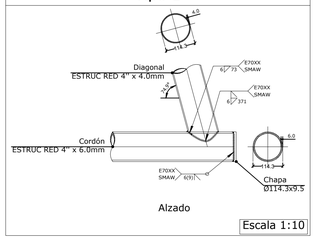
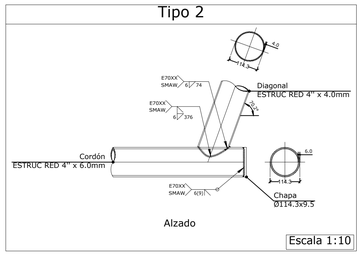
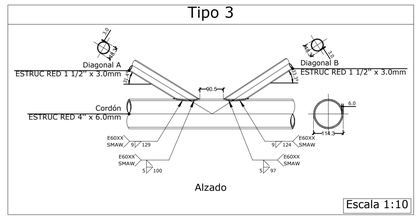
Tipo 1



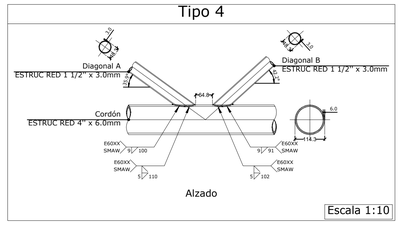
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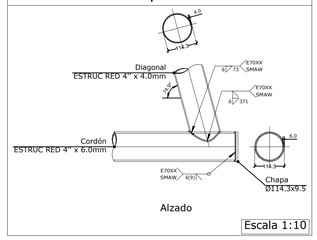
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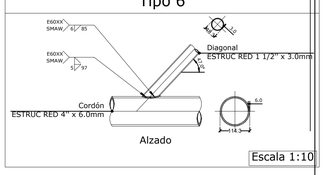
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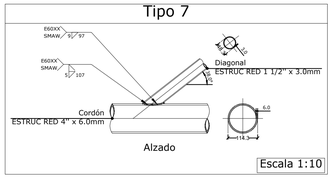
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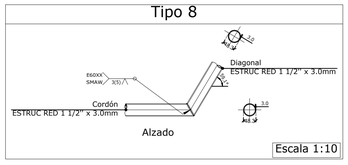
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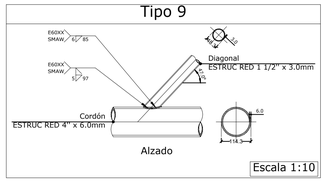
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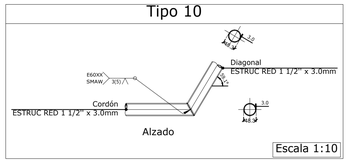
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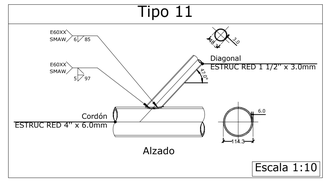
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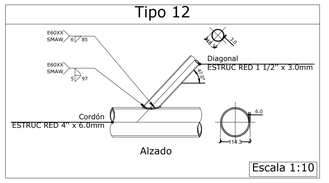
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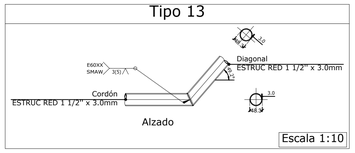
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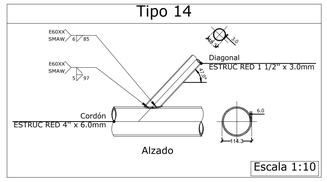
Tipo 12



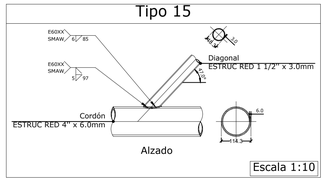
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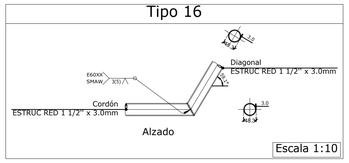
Tipo 14



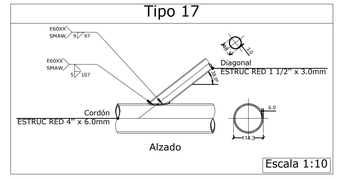
Tipo 15



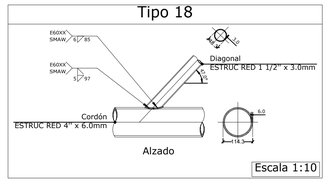
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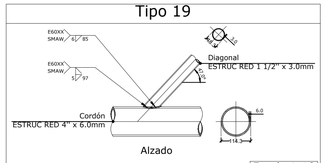
Tipo 17



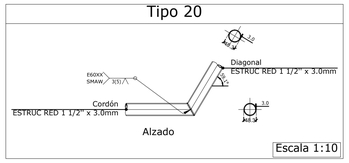
Tipo 18



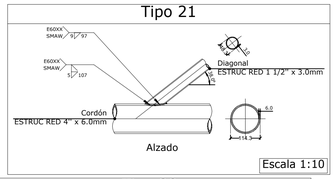
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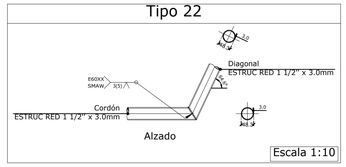
Tipo 20



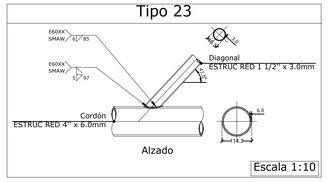
Tipo 21



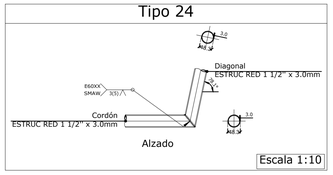
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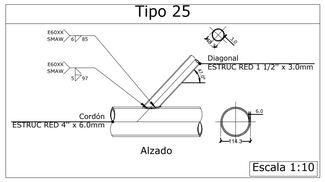
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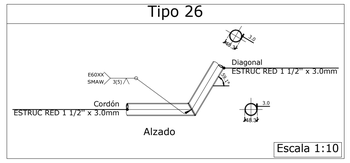
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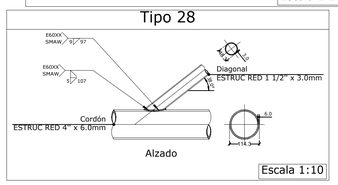
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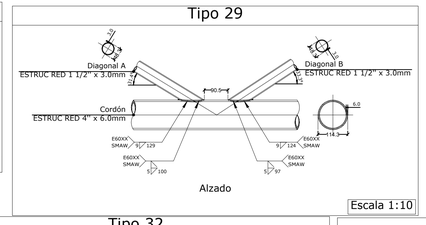
Tipo 26



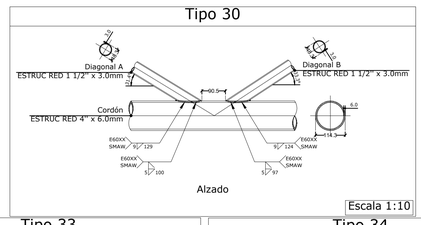
Tipo 28



Tipo 29

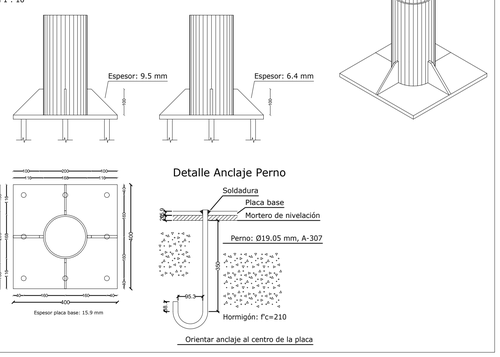


Tipo 30

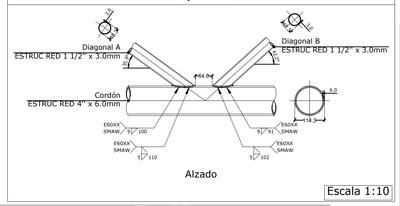


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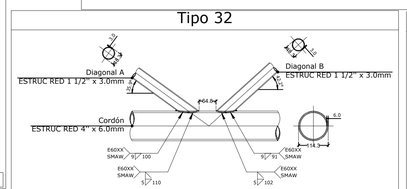
Tipo 27
Dimensiones Placa = 400x400x15.9 mm (ASTM A 572 50 ksi)
Pernos = Ø19.05 mm, A-307
Ref. pilares : ====
Escala 1 : 10



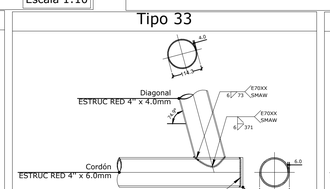
Tipo 31



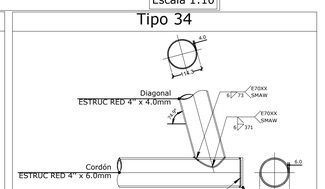
Tipo 32



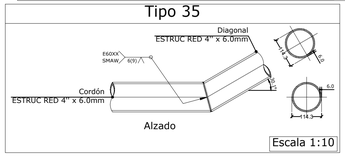
Tipo 33



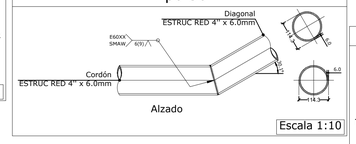
Tipo 34



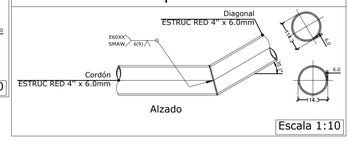
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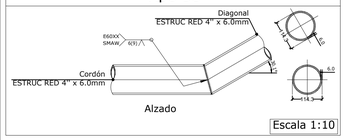
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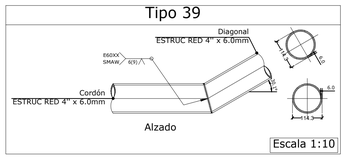
Tipo 37



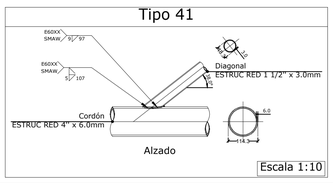
Tipo 38



Tipo 39



Tipo 41



Tipo 42

Tipo 40

Tipo 43

JULIAN VARGAS BLANDON

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PROYECTO
DISEÑO ESTRUCTURAL PARA GRADAS, CUBIERTA METALICA EN POLIDEPORTIVO, MANZANARES CALDAS

PROPIETARIO : MUNICIPIO DE MANZANARES CALDAS

DISEÑO
ING. JULIAN VARGAS BLANDON
TP. 17202-08747 CALDAS

CONTIENE DISEÑO ESTRUCTURAL :DETALLE DE UNIONES APLICADAS ESTRUCTURA DE CUBIERTA

ESCALA	FECHA	DIBUJO
INDICADAS	03/2024	J.V.B

PARÁMETROS DE DISEÑO:

ESPECIFICACIONES TECNICAS

METODO DE CALCULO : DINAMICO ESPECTRAL
MANZANARES CALDAS
Criterio de armado a aplicar por ductilidad: DMO

ESPECIFICACIONES	Kg/cm2	MPA Concreto
Columnas y pantallas	210,0	21,0
Concreto Vigas y placa	210,0	21,0
Concreto Escalera	210,0	21,0
Concreto Cimentación	210,0	21,0
Refuerzo >#2(1/4")	422	42.0
Mortero de pega	75.0	7.5
Tamaño máximo del agregado= 3/4" (0.019 m)		
Malla Electrosoldada	4930	500
Resistencia comprension de mamposteria no estructural f'm 6 mpa		

CARGA DE TRABAJO DEL TERRENO:
Qa=1.00 Kg/cm2
CARACTERISTICAS DEL SUELO:
suelo SM

ALBAÑILERIA:
1.- LOS MUROS PORTANTES SERAN DE LADRILLO ASTM C-73 2.- MORTERO e= 1.5cm , mezcla cemento-arena de 1:4

SELLOS APROBACION

FIRMAS DE LOS PROFESIONALES RESPONSABLES :

INGENIERO ESTRUCTURAL.

PROPIETARIO

PLANO No

E 2/5