

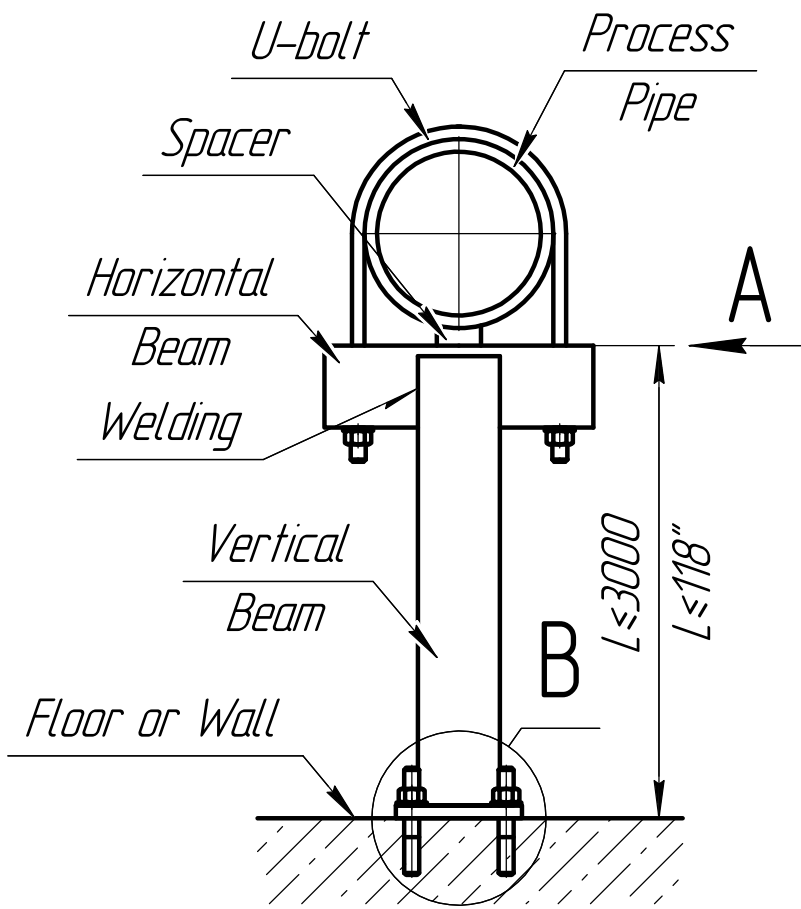


Ultimo Site Preparation Requirements

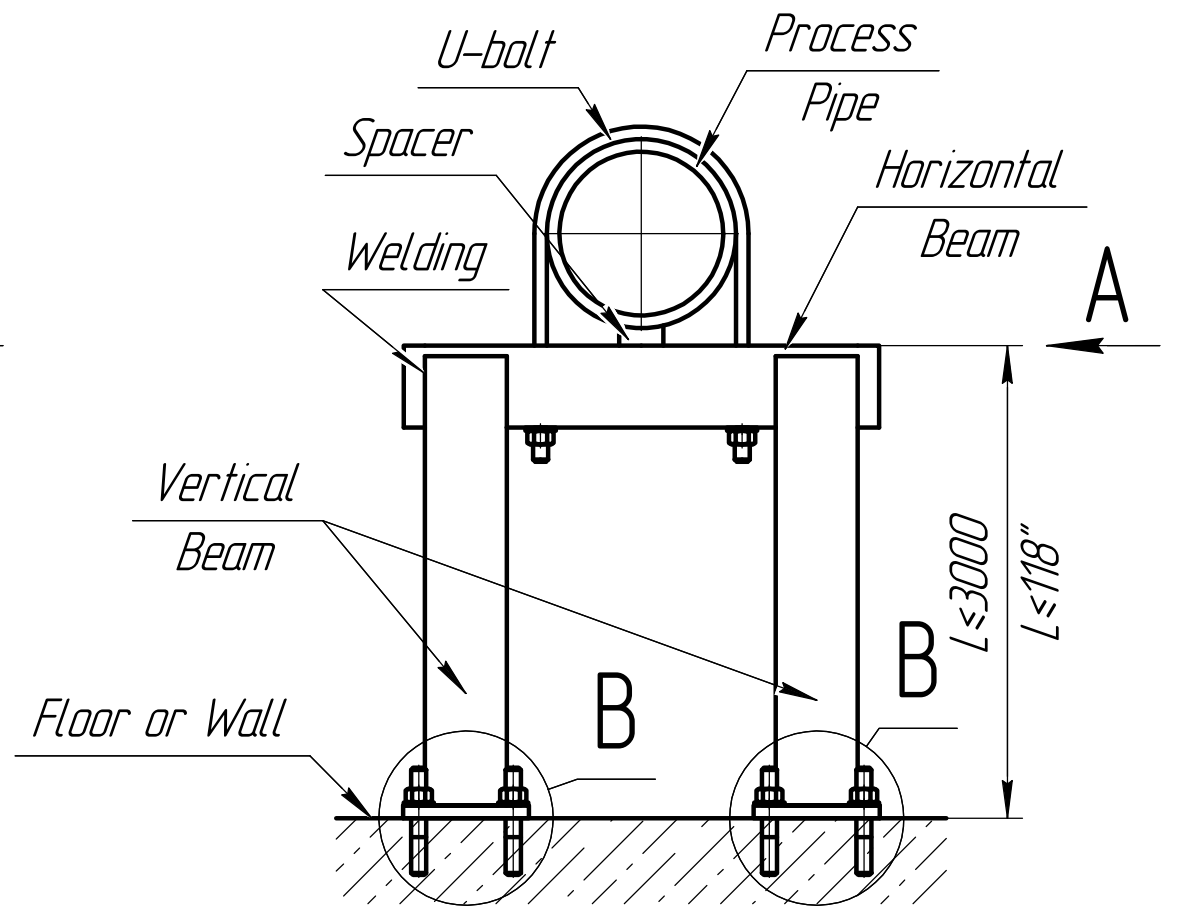
**Appendix A:
Ultimo Rigid Support Guide**

Rigid Supports

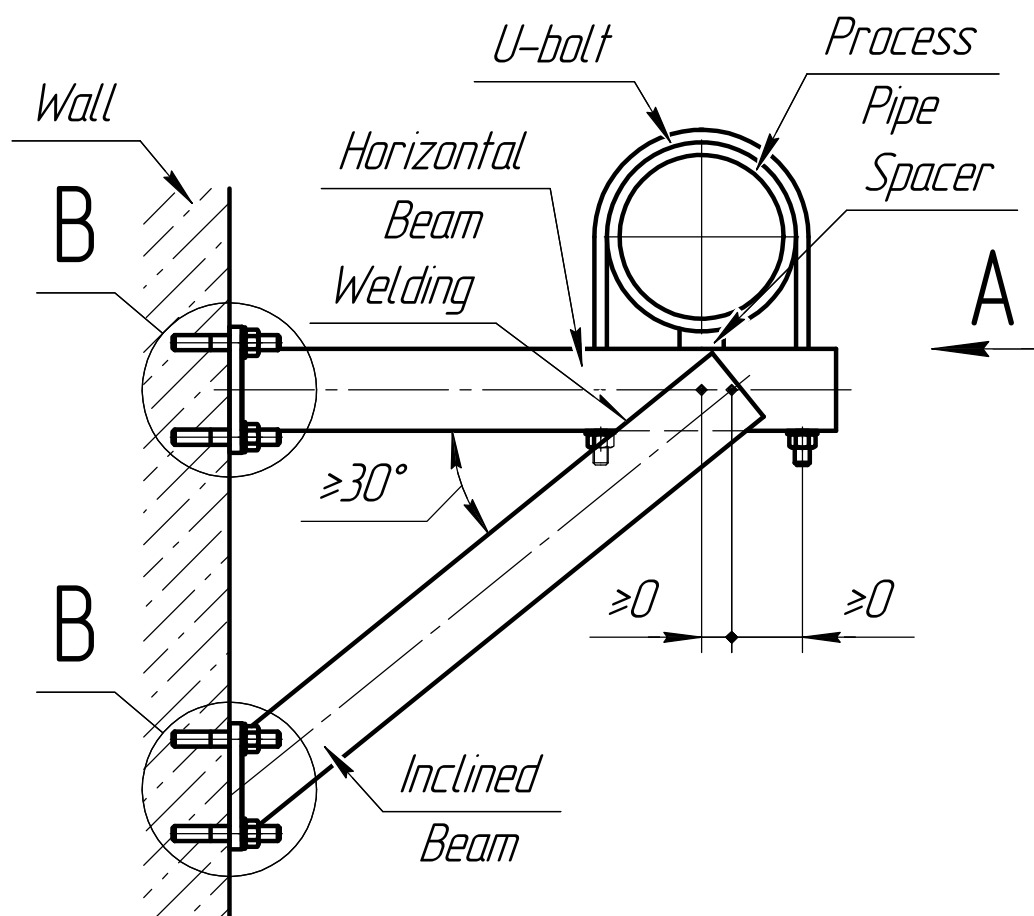
SUPPORT TYPES



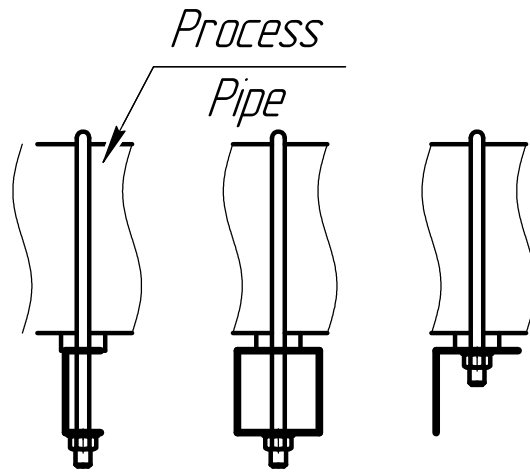
Single Support



Double Support

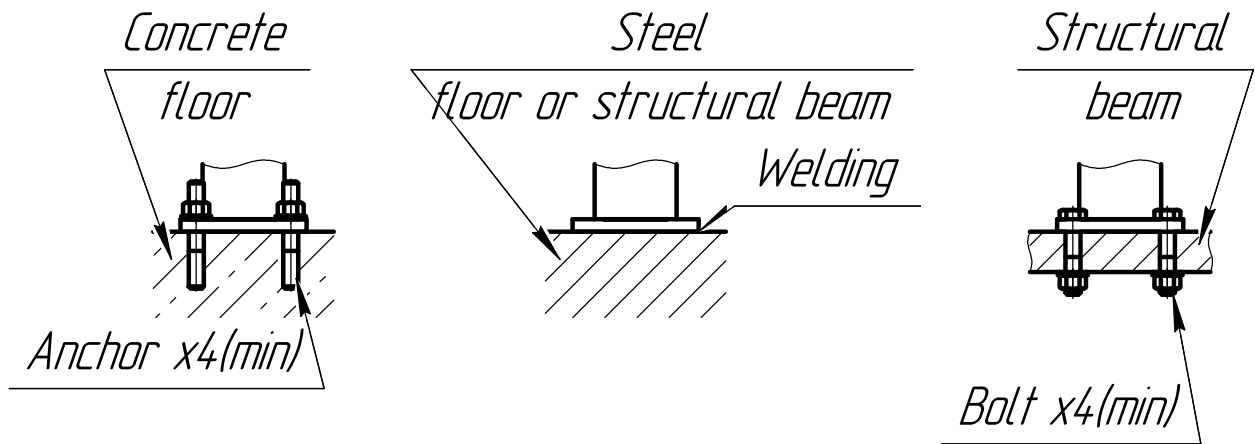


Inclined beam support



A

U-bolt connection with different types of horizontal beams.



B

Types of fixing rigid supports to the floor/structural beam/wall.

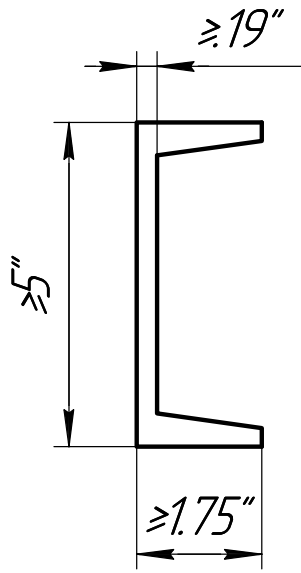
Imperial

Pipe Size			≤10" (OD 10.75")			>10" (OD 10.75")		
Type Support			Single Support	Double Support	Inclined Beam Support	Single Support	Double Support	Inclined Beam Support
Horizontal Beam	Standard	☐	C5, MC6	C5, MC6	C5, MC6	C8	C8	C8
		L	L5x5	L5x5	L5x5	L8x8	L8x8	L8x8
		☐	TS4x4	TS4x4	TS4x4	TS8x8	TS8x8	TS8x8
	Non-standard	☐	pic. 1	pic. 1	pic. 1	pic. 13	pic. 13	pic. 13
		L	pic. 2	pic. 2	pic. 2	pic. 14	pic. 14	pic. 14
		☐	pic. 3	pic. 3	pic. 3	pic. 15	pic. 15	pic. 15
Vertical Beam/ Inclined Beam	Standard	☐	C6, MC6	C5, MC6	C6, MC6	C10	C8	C10
		L	L6x6	L5x5	L6x6	-	L8x8	-
		☐	TS5x5	TS4x4	TS5x5	TS10x10	TS8x8	TS10x10
		☐	TR7	TR6	TR7	TR12	TR8	TR12
		I	S6	S5	S6	HP10, S10	HP8, S8	HP10, S10
		T	ST6	ST5	ST6	ST10	ST9	ST10
	Non-standard	☐	pic. 4	pic. 1	pic. 4	pic. 16	pic. 13	pic. 16
		L	pic. 5	pic. 2	pic. 5	pic. 17	pic. 14	pic. 17
		☐	pic. 6	pic. 3	pic. 6	pic. 18	pic. 15	pic. 18
		☐	pic. 7	pic. 10	pic. 7	pic. 19	pic. 22	pic. 19
		I	pic. 8	pic. 11	pic. 8	pic. 20	pic. 23	pic. 20
		T	pic. 9	pic. 12	pic. 9	pic. 21	pic. 24	pic. 21
Spacer	-	-	100050	100050	100050	100051	100051	100051
U-bolt	Standard	-	pic. 47	pic. 47	pic. 47	pic. 48	pic. 48	pic. 48
Anchor or Bolt	Standard	-	pic. 49	pic. 49	pic. 49	pic. 50	pic. 50	pic. 50

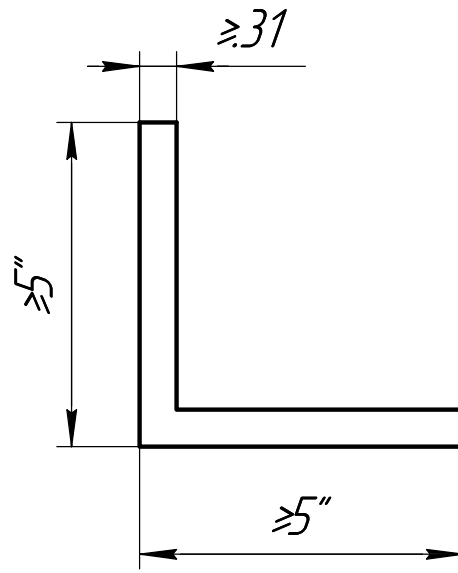
Metric DIN

Pipe Size			≤10" (OD 273,1mm)			>10" (OD 273,1mm)			
Type Support			Single Support	Double Support	Inclined Beam Support	Single Support	Double Support	Inclined Beam Support	
Horizontal Beam	Standard	☐	C150, U120, UPN120	C150, U120, UPN120	C150, U120, UPN120	C200, U200, UPN200	C200, U200, UPN200	C200, U200, UPN200	
		L	L 120x120	L 120x120	L 120x120	-	-	-	
	Non-standard	☐	pic. 25	pic. 25	pic. 25	pic. 37	pic. 37	pic. 37	
		L	pic. 26	pic. 26	pic. 26	pic. 38	pic. 38	pic. 38	
		☐	pic. 27	pic. 27	pic. 27	pic. 39	pic. 39	pic. 39	
		☐	pic. 27	pic. 27	pic. 27	pic. 39	pic. 39	pic. 39	
Vertical Beam/ Inclined Beam	Standard	☐	C150, U140, UPN140	C150, U120, UPN120	C150, U140, UPN140	C250, U240, UPN240	C200, U200, UPN200	C250, U240, UPN240	
		L	L 140x140	L 120x120	L 140x140	-	-	-	
		I	DIL 140, IPE160, IPEA160, IPER160, IPN160, W130	DIL 120, IPE140, IPEA140, IPER140, IPN160, W130	DIL 140, IPE160, IPEA160, IPER160, IPN160, W130	DIL 240, HP250, IPE240, IPEA240, IPE0240, IPER240, IPN240, S250, W250	DIL 200, HP200, IPE200, IPEA200, IPE0200, IPER200, IPN200, S200, W200	DIL 240, HP250, IPE240, IPEA240, IPE0240, IPER240, IPN240, S250, W250	
	Non-standard	☐	pic. 28	pic. 25	pic. 28	pic. 40	pic. 37	pic. 40	
		L	pic. 29	pic. 26	pic. 29	pic. 41	pic. 38	pic. 41	
		☐	pic. 30	pic. 27	pic. 30	pic. 42	pic. 39	pic. 42	
		☐	pic. 31	pic. 34	pic. 31	pic. 43	pic. 45	pic. 43	
		I	pic. 32	pic. 35	pic. 32	pic. 44	pic. 46	pic. 44	
		T	pic. 33	pic. 36	pic. 33	-	-	-	
	Spacer	-	-	100050	100050	100050	100051	100051	100051
	U-bolt	Standard	-	pic. 51	pic. 51	pic. 51	pic. 52	pic. 52	pic. 52
	Anchor or Bolt	Standard	-	pic. 53	pic. 53	pic. 53	pic. 54	pic. 54	pic. 54

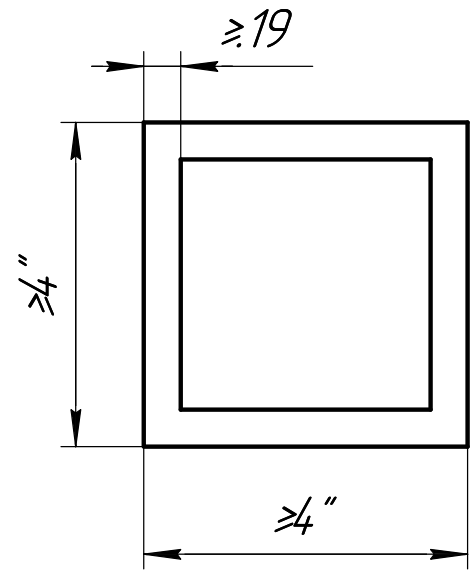
Pipe Size			≤10" (OD 273,1MM)			>10" (OD 273,1MM)		
Type Support			Single Support	Double Support	Inclined Beam Support	Single Support	Double Support	Inclined Beam Support
Horizontal Beam	Standard	☐	CH120	CH120	CH120	CH200	CH200	CH200
		└	L 120x120	L 120x120	L 120x120	L 200x200	L 200x200	L 200x200
		☐	☐ 100x100	☐ 100x100	☐ 100x100	☐ 200x200	☐ 200x200	☐ 200x200
	Non-standard	☐	pic. 25	pic. 25	pic. 25	pic. 37	pic. 37	pic. 37
		└	pic. 26	pic. 26	pic. 26	pic. 38	pic. 38	pic. 38
		☐	pic. 27	pic. 27	pic. 27	pic. 39	pic. 39	pic. 39
Vertical Beam/ Inclined Beam	Standard	☐	CH140	CH120	CH140	CH250	CH200	CH250
		└	L 150x150	L 120x120	L 150x150	└ 250x250	L 200x200	└ 250x250
		☐	☐ 120x120	☐ 100x100	☐ 120x120	☐ 250x250	☐ 200x200	☐ 250x250
		☐	☐ 140x80	☐ 120x60	☐ 140x80	☐ 250x150	☐ 220x140	☐ 250x150
		I	SB140, SC140	SB120, SC120	SB140, SC140	SB240, SC250	SB200, SC200	SB240, SC250
		T	T140	T120	T140	-	-	-
	Non-standard	☐	pic. 28	pic. 25	pic. 28	pic. 40	pic. 37	pic. 40
		└	pic. 29	pic. 26	pic. 29	pic. 41	pic. 38	pic. 41
		☐	pic. 30	pic. 27	pic. 30	pic. 42	pic. 39	pic. 42
		☐	pic. 31	pic. 34	pic. 31	pic. 43	pic. 45	pic. 43
		I	pic. 32	pic. 35	pic. 32	pic. 44	pic. 46	pic. 44
		T	pic. 33	pic. 36	pic. 33	-	-	-
Spacer	-	-	100050	100050	100050	100051	100051	100051
U-bolt	Standard	-	pic. 51	pic. 51	pic. 51	pic. 52	pic. 52	pic. 52
Anchor or Bolt	Standard	-	pic. 53	pic. 53	pic. 53	pic. 54	pic. 54	pic. 54



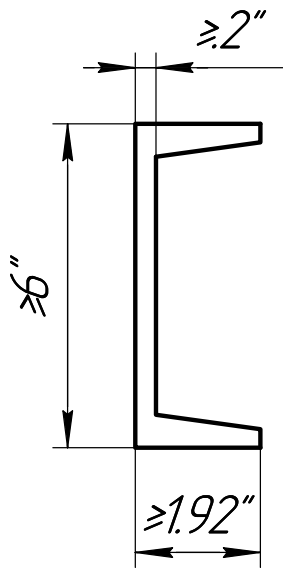
Pic. 1



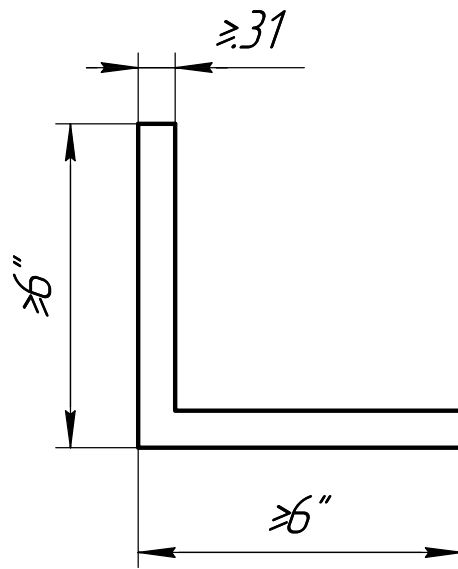
Pic. 2



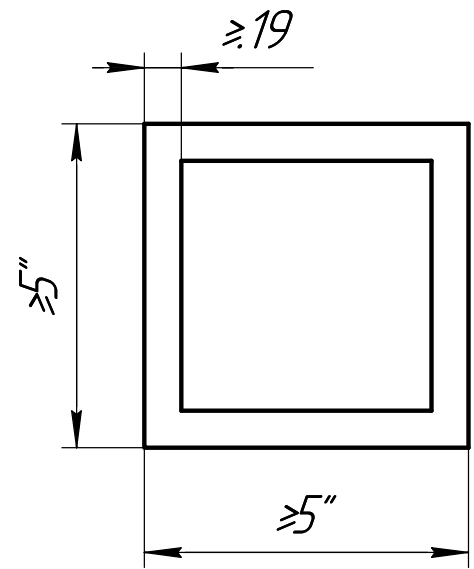
Pic. 3



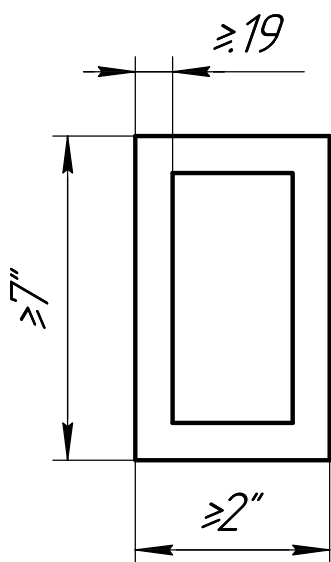
Pic. 4



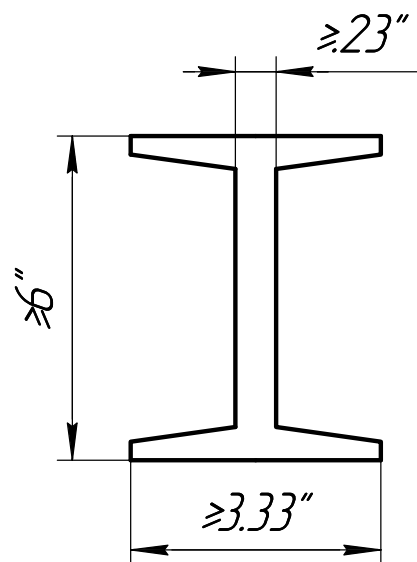
Pic. 5



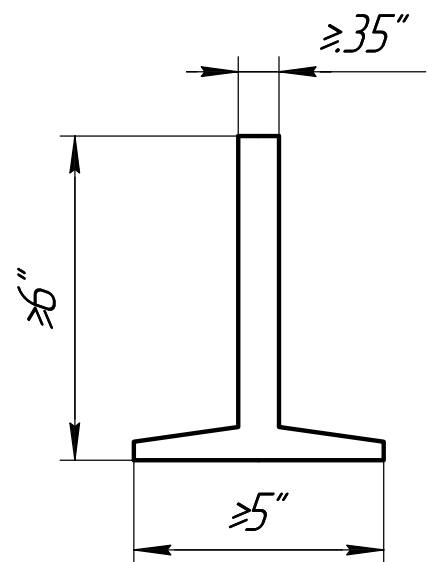
Pic. 6



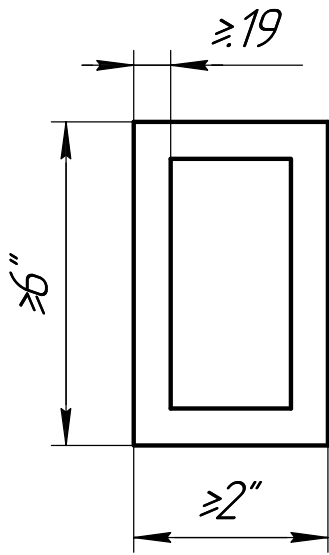
Pic. 7



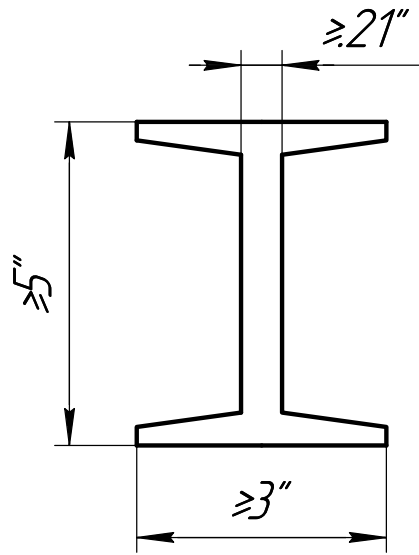
Pic. 8



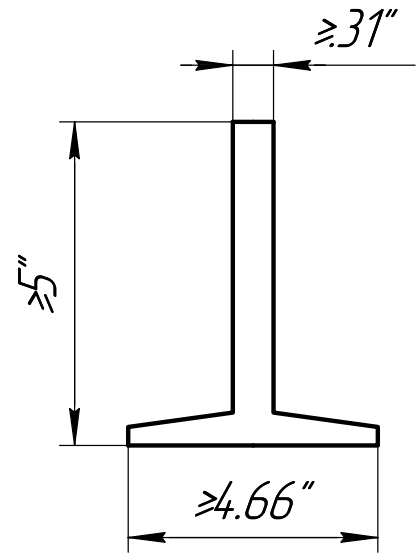
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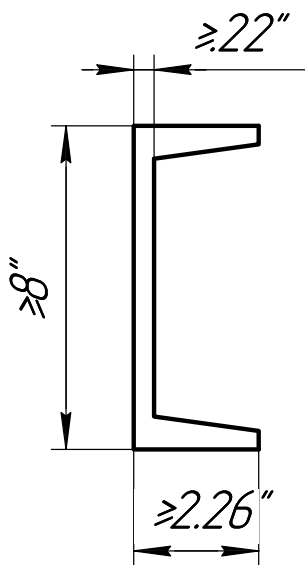
Pic. 10



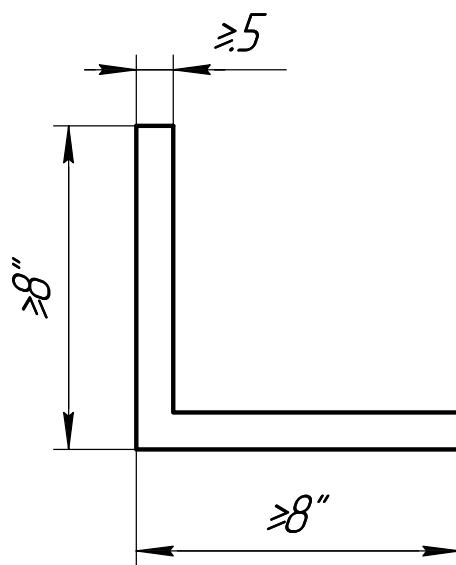
Pic. 11



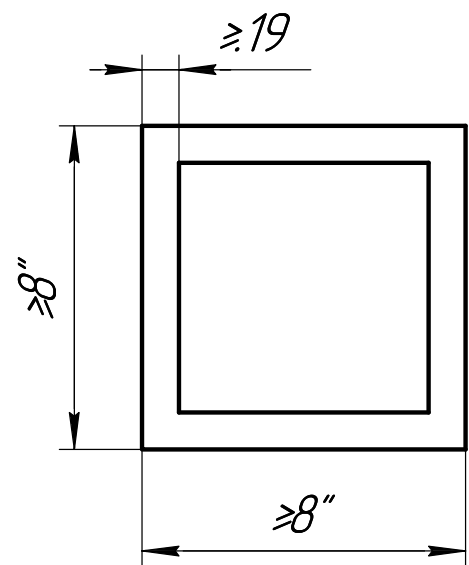
Pic. 12



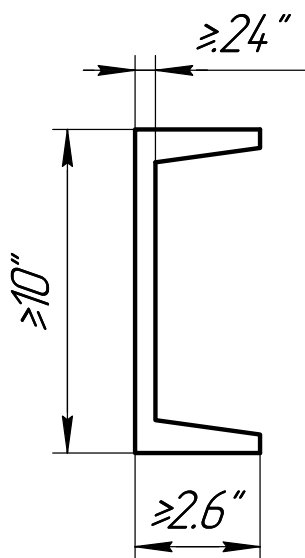
Pic. 13



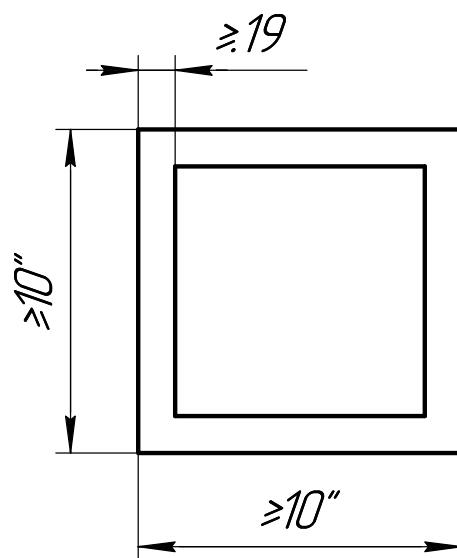
Pic. 14



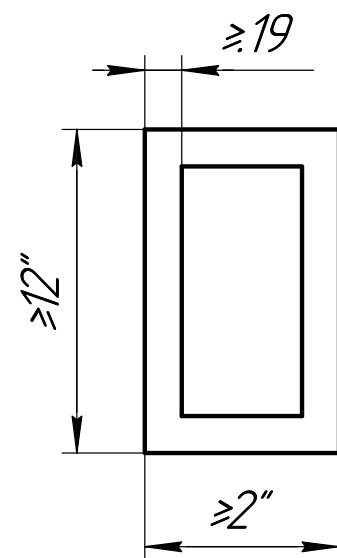
Pic. 15



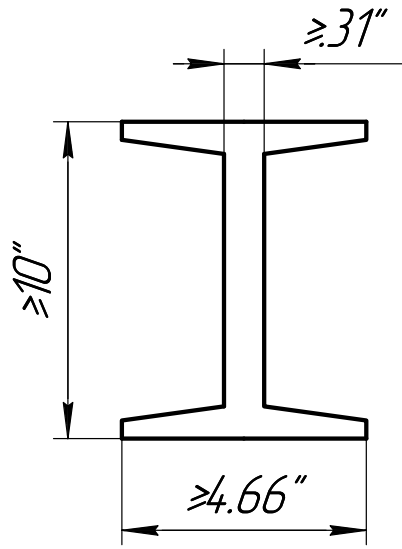
Pic. 16



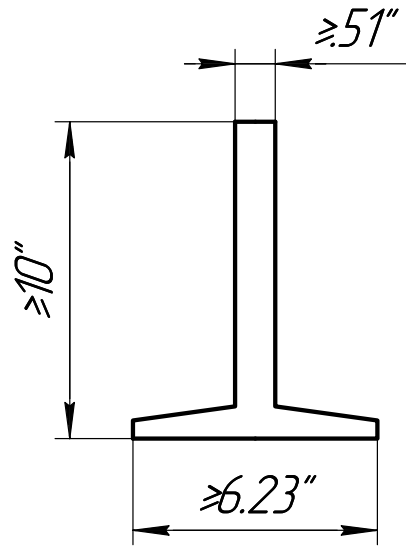
Pic. 17



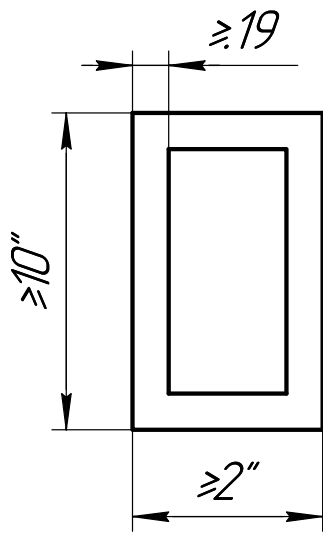
Pic. 18



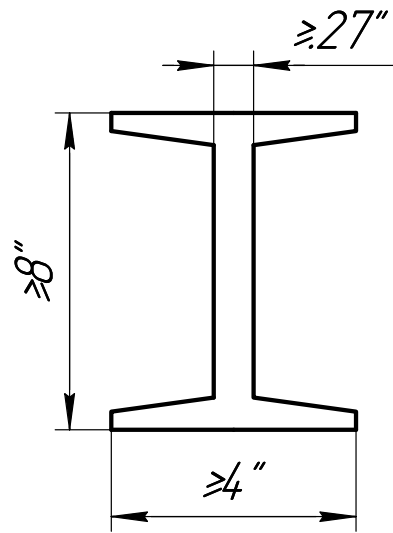
Pic. 19



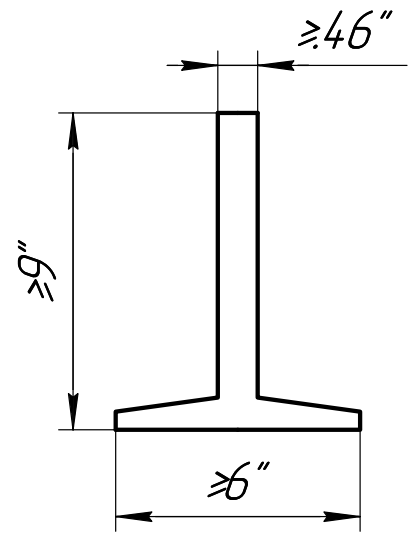
Pic. 20



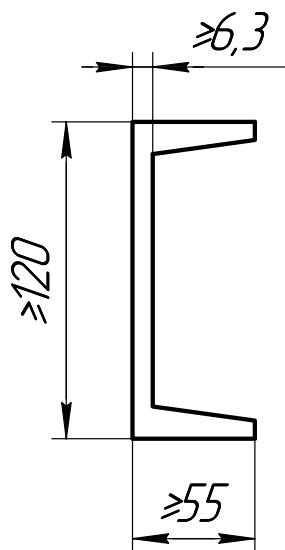
Pic. 22



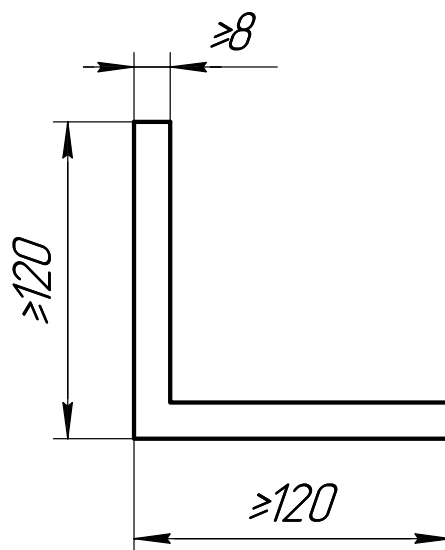
Pic. 23



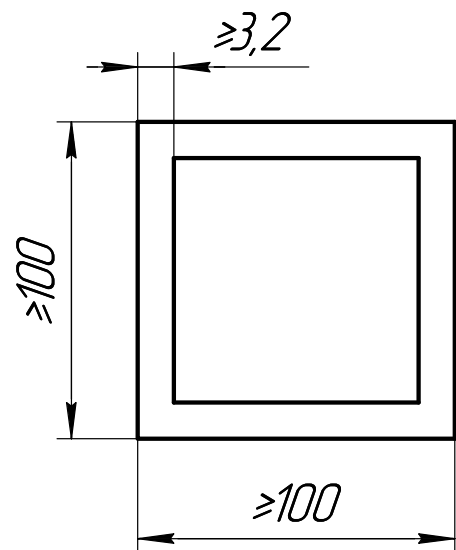
Pic. 24



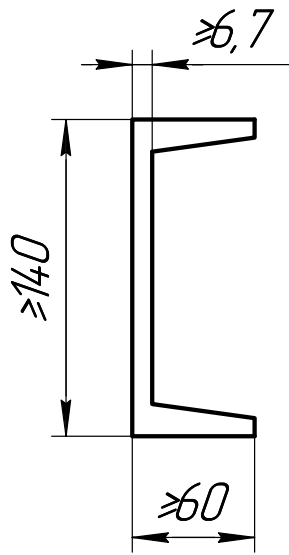
Pic. 25



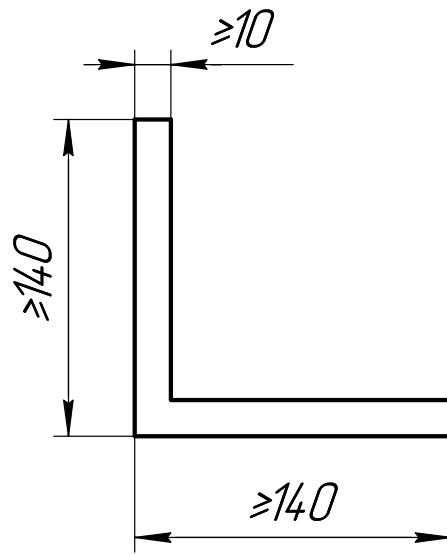
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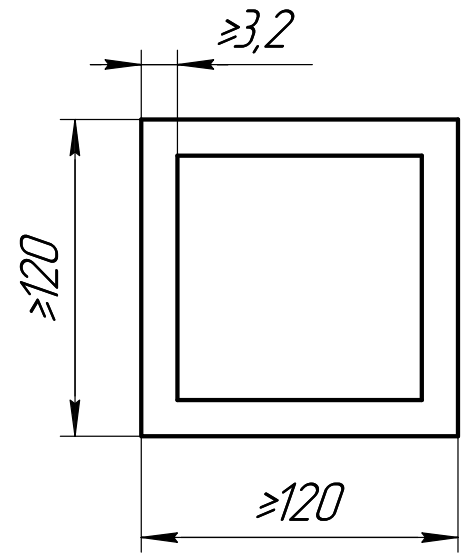
Pic. 27



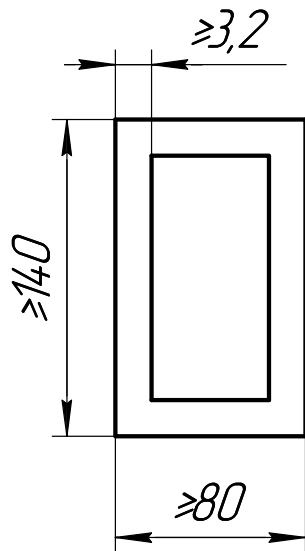
Pic. 28



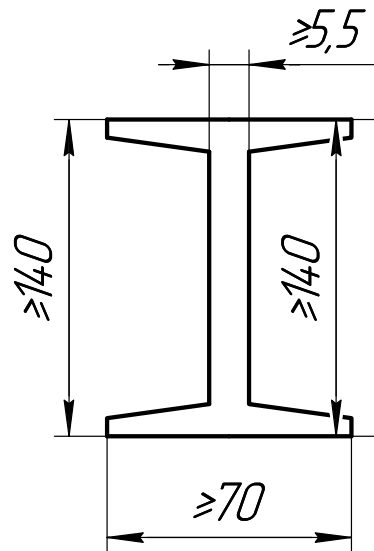
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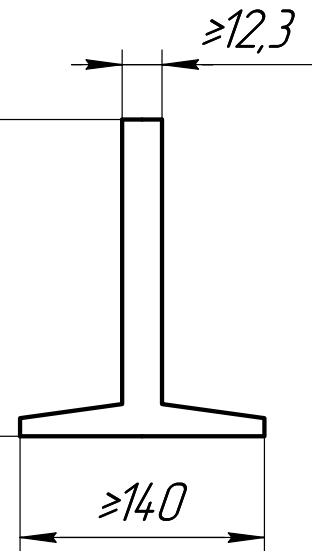
Pic. 30



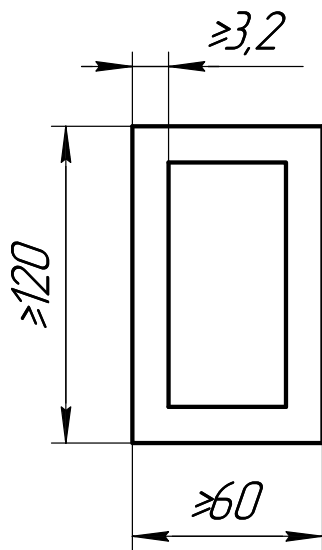
Pic. 31



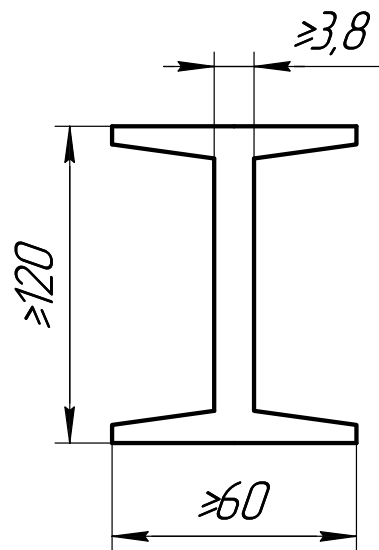
Pic. 32



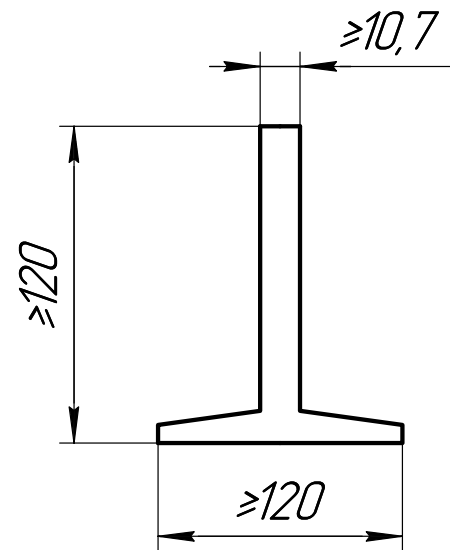
Pic. 33



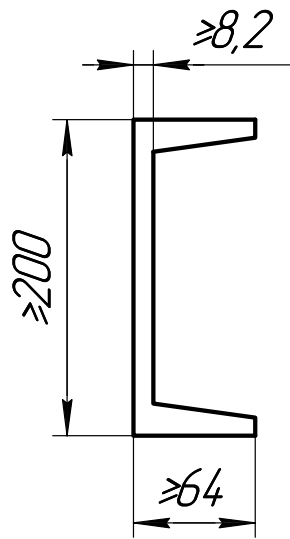
Pic. 34



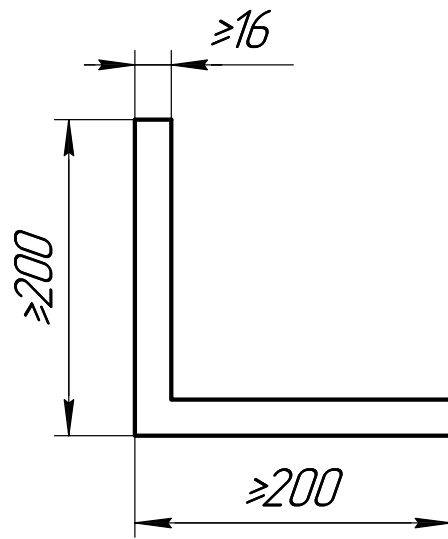
Pic. 35



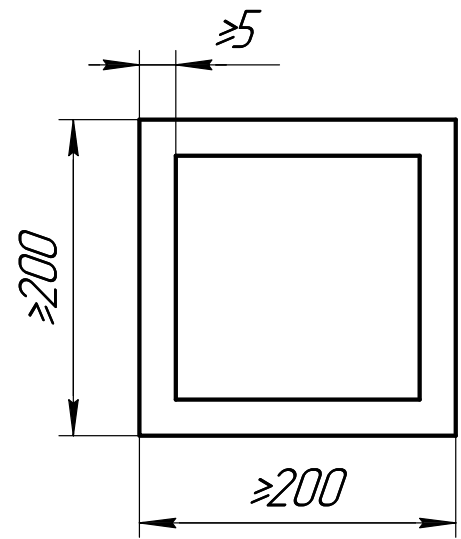
Pic. 36



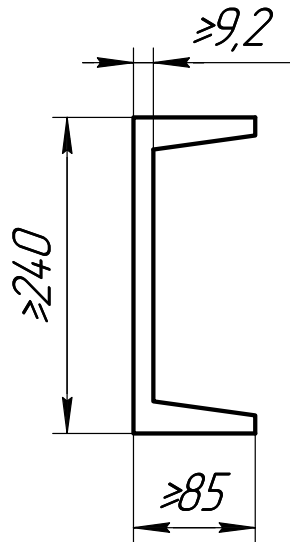
Pic. 37



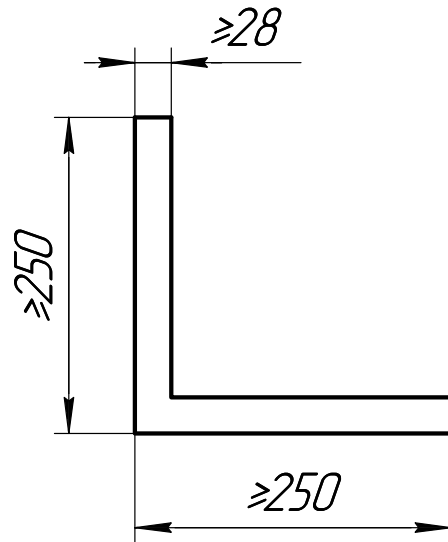
Pic. 38



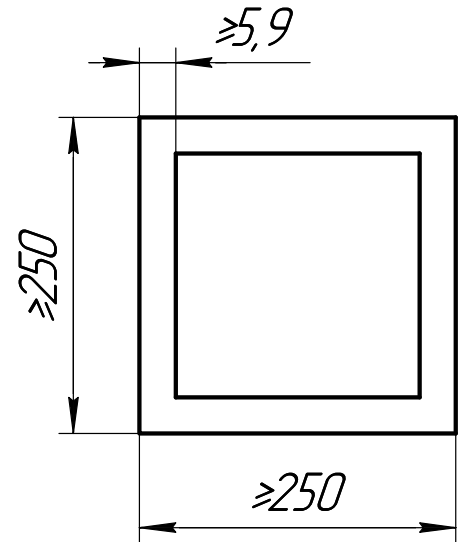
Pic. 39



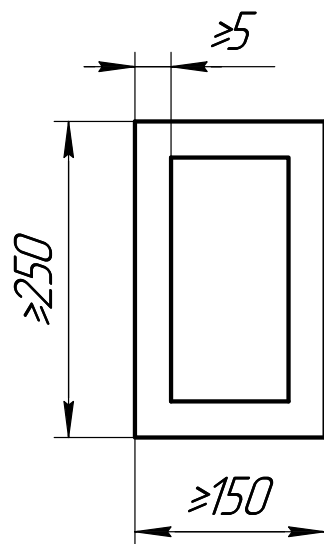
Pic. 40



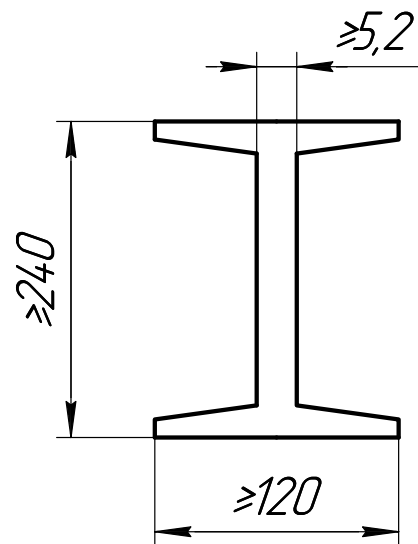
Pic. 41



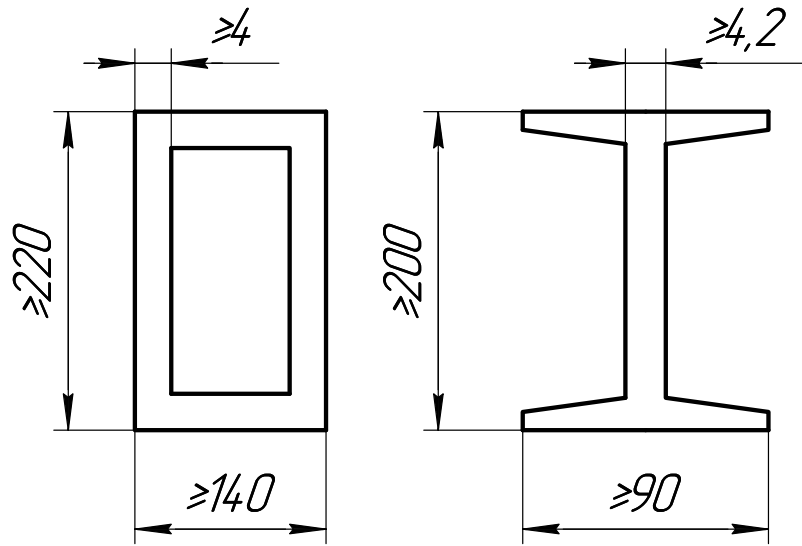
Pic. 42



Pic. 43

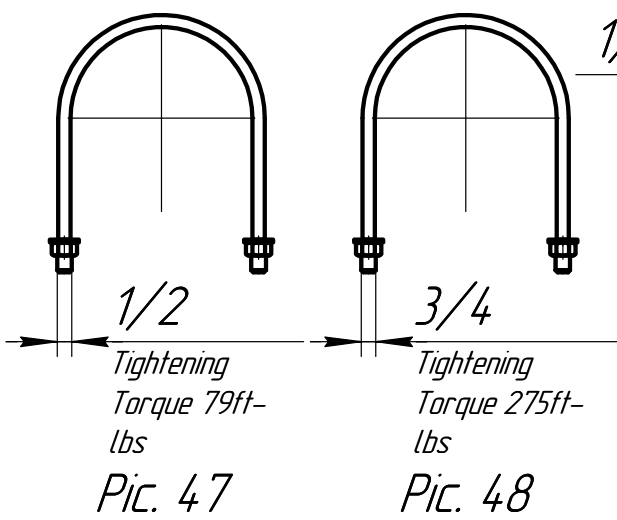


Pic. 44



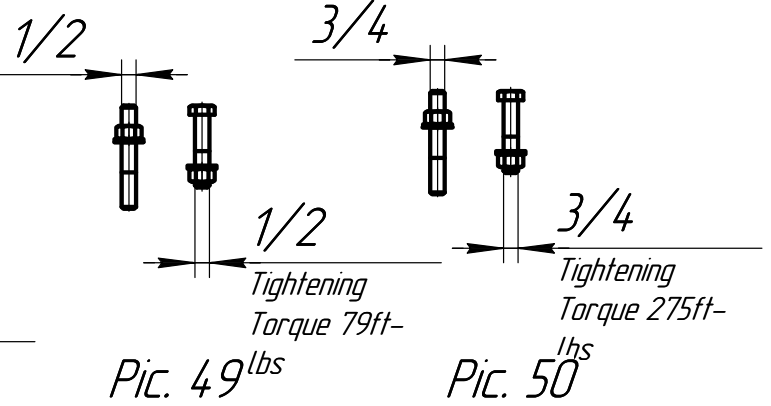
Pic. 45

Pic. 46



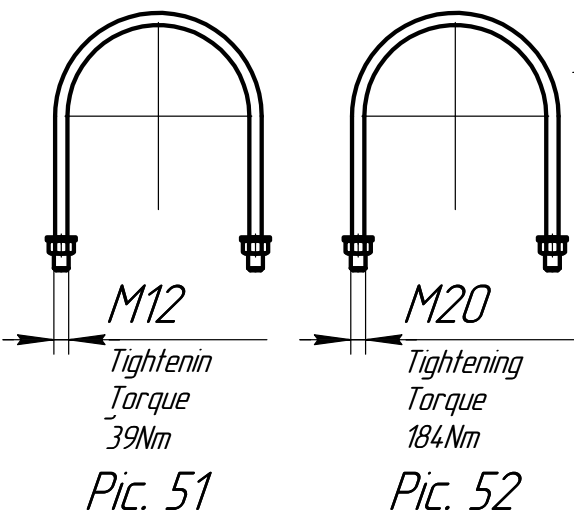
Pic. 47

Pic. 48



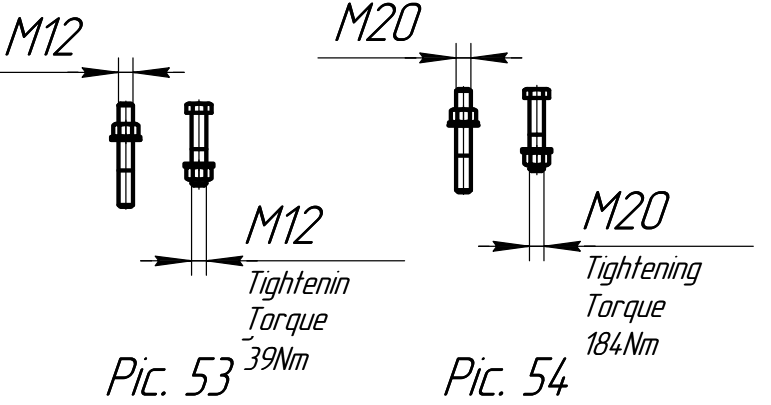
Pic. 49

Pic. 50



Pic. 51

Pic. 52



Pic. 53

Pic. 54

Example.

Let you have a pipe with OD 8". You need to build 2 rigid supports.

- 1. Choose the type for each rigid support (single support, double support, or inclined beam support; refer to the Support Types sheet). For example, you want to build 2 single-type supports.*
- 2. Choose the standard of your rigid support beams (Imperial, metric DIN, metric ISO). For example, you selected imperial beams.*
- 3. Find the table named Imperial. In the row Pipe Size, choose the cell OD<10" because your pipe OD is 8". In the row Support Type, select the cell Single Support.*
- 4. Choose the row Horizontal Beam. In this row, choose the cell Standard if you know the standard number for your beam, and Non-Standard if your beam was made non-standard, or if you don't know the standard number. Choose the row showing the beam type (C or U-channel, L-channel, or square pipe). For example, you selected L-channel. The crossing of rows Horizontal Beam x Standard x L and columns OD<10" x Single Support points at the cell L5x5.*
- 5. To determine the dimensions of the vertical beam, go to step 4 and choose the row Vertical Beam.*
- 6. Choose the row Spacer. The crossing of the row Spacer and column OD<10" x Single Support points at the cell 100500. This is the Spacer part number that you must use in your rigid support design.*
- 7. Choose the row U-bolt. The crossing of the row U-bolt and the column OD<10" x Single Support points at the cell pic. 51, where you will determine the size of the U-bolts and their tightening torque for your rigid support system.*
- 8. Choose the row Anchor or Bolt. The crossing of the row Anchor or Bolt and the columns OD<10" x Single Support points at the cell pic. 53, where you will determine your rigid support system's anchor or bolt size and tightening torque.*
- 9. Design the rigid support system according to the data you obtained from the table and the figures.*
- 10. Fabricate and assemble the rigid support system.*