Project:L20MxW10MxH4M(Sweden)

Stage:Architectural Drawing

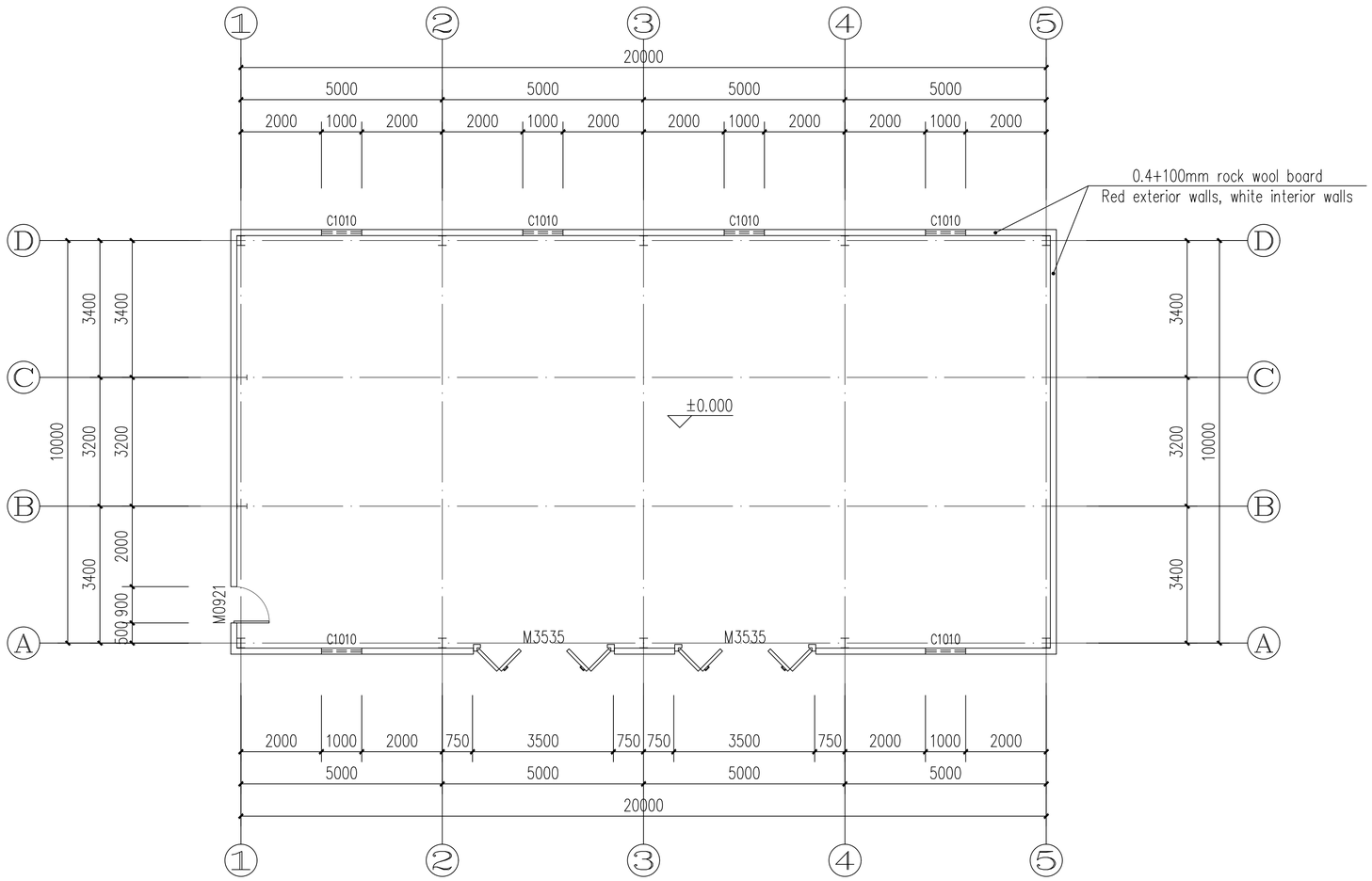
DATE：2025.12

会 签 栏		
专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

平面示意		KEY PLAN
图 名		TITLE
日 期	2025.12	DATE
图 号	A2	DWG. NO
比 例		SCALE
设计制图人		DRAFTING DESIGNER
工种负责人		DISCIPLINE CHIEF
设计主持人		DESIGN CHIEF
校 对		CHECKED BY
审 核		VERIFIED BY
审 定		APPROVED BY
所 长		DEPT. DIRECTOR
所 别		DEPT.
子 项		SUB ITEM
工程名称		PROJECT

山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

证书号	LICENSE NO.	
设计号	PROJECT NO.	



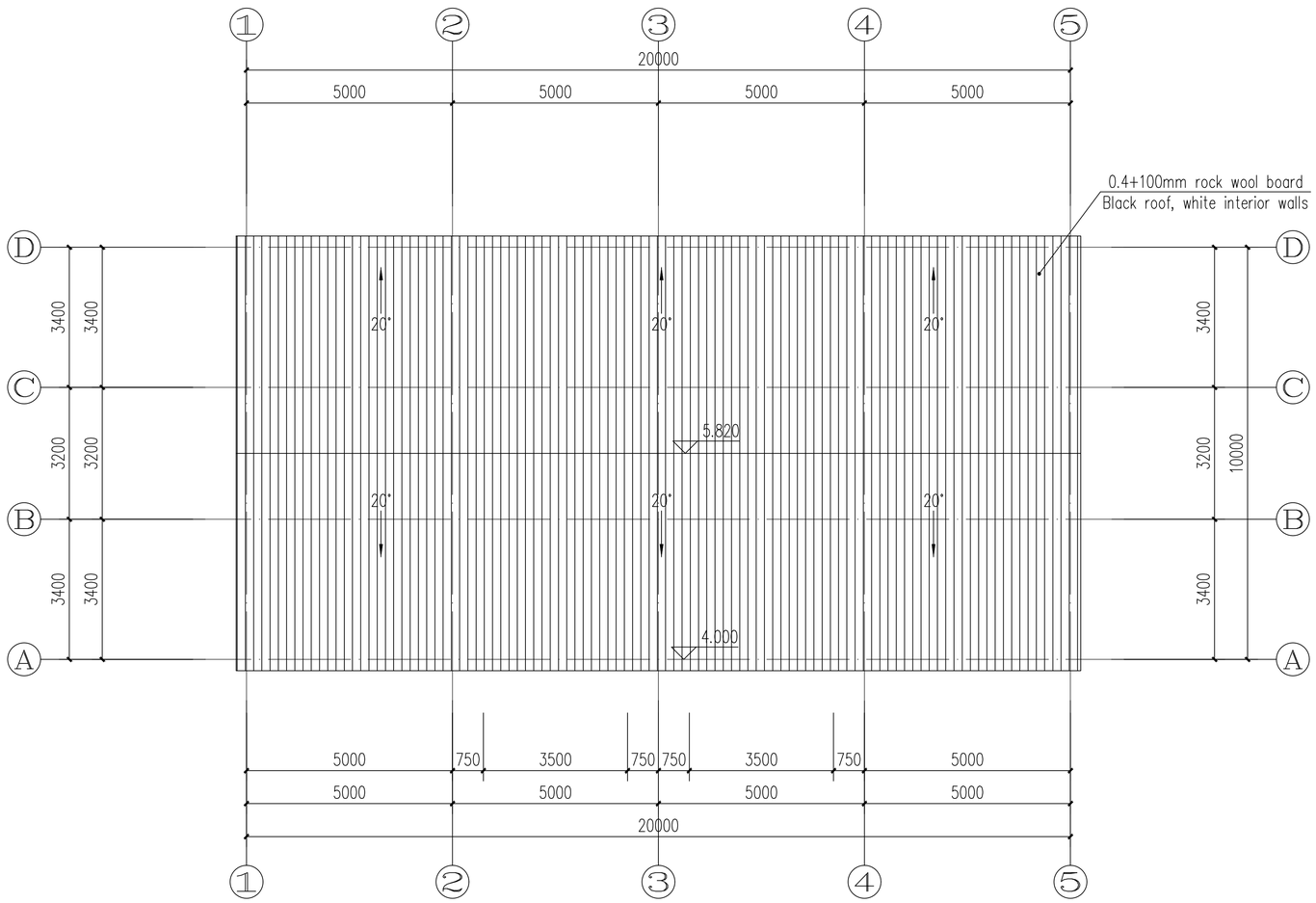
axial plan view 1:100

会 签 栏		
专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

平面示意		KEY PLAN
图 名		TITLE
日 期	2025.12	DATE
图 号	A2	DWG. NO
比 例		SCALE
设计制图人		DRAFTING DESIGNER
工种负责人		DISCIPLINE CHIEF
设计主持人		DESIGN CHIEF
校 对		CHECKED BY
审 核		VERIFIED BY
审 定		APPROVED BY
所 长		DEPT. DIRECTOR
所 别		DEPT.
子 项		SUB ITEM
工程名称		PROJECT

山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

证书号	LICENSE NO.	
设计号	PROJECT NO.	



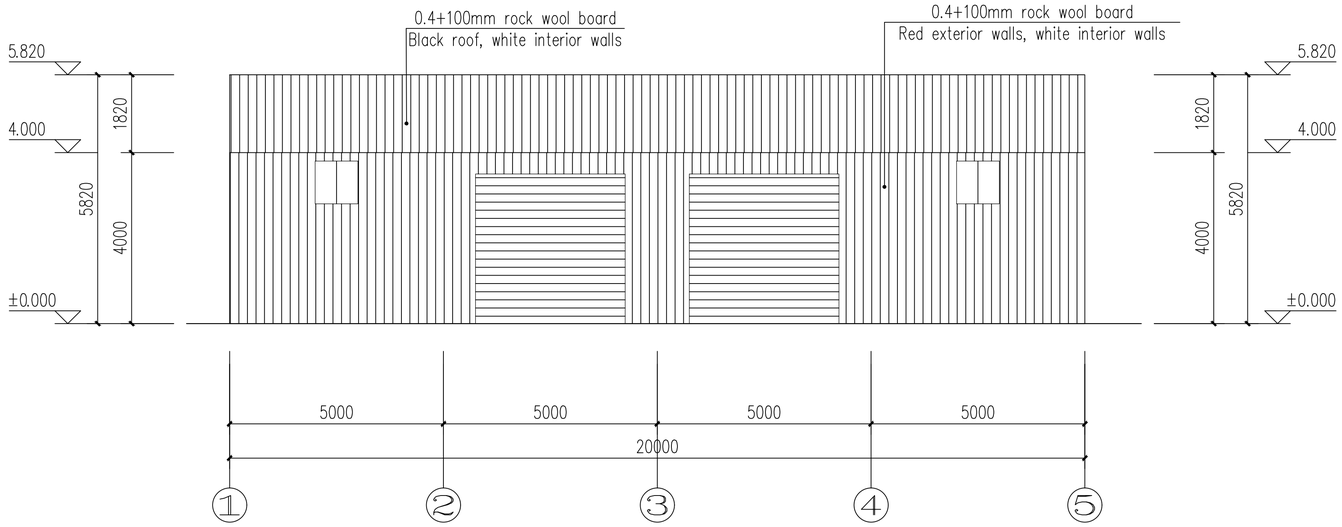
axial plan view 1:100

会 签 栏		
专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

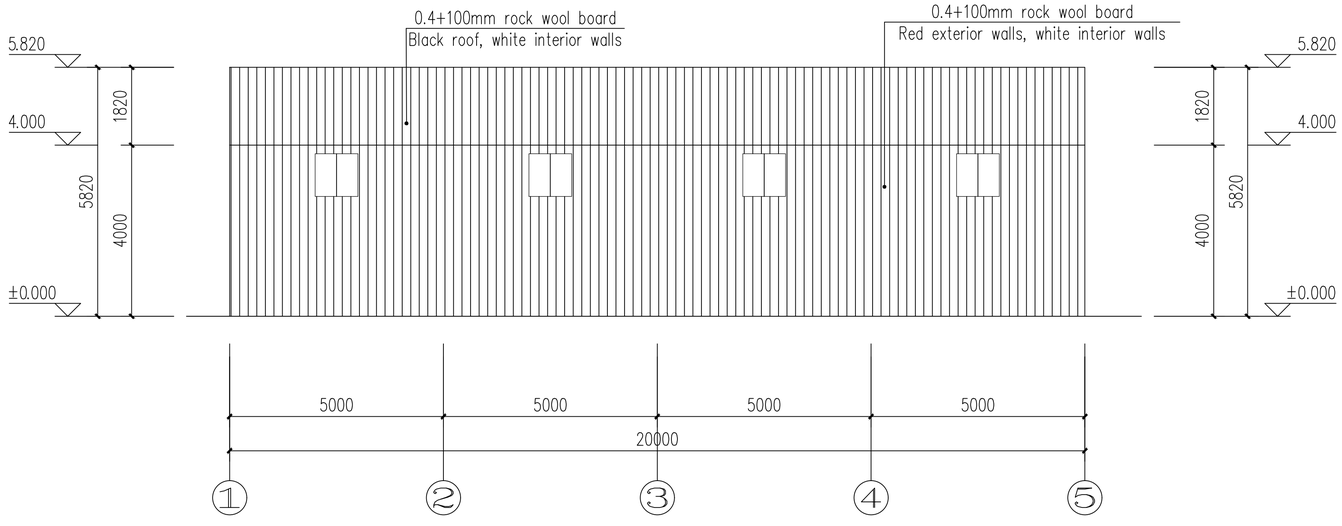
平面示意		KEY PLAN
图 名		TITLE
日 期	2025.12	DATE
图 号	A2	DWG. NO
比 例		SCALE
设计制图人		DRAFTING DESIGNER
工种负责人		DISCIPLINE CHIEF
设计主持人		DESIGN CHIEF
校 对		CHECKED BY
审 核		VERIFIED BY
审 定		APPROVED BY
所 长		DEPT. DIRECTOR
所 别		DEPT.
子 项		SUB ITEM
工程名称		PROJECT

山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

证书号	LICENSE NO.	
设计号	PROJECT NO.	



axial plan view 1:100



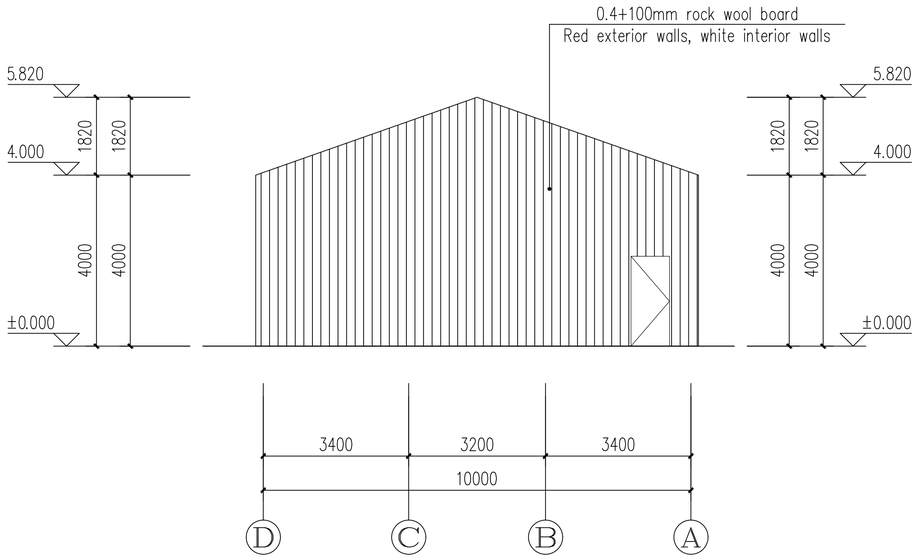
axial plan view 1:100

会 签 栏		
专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

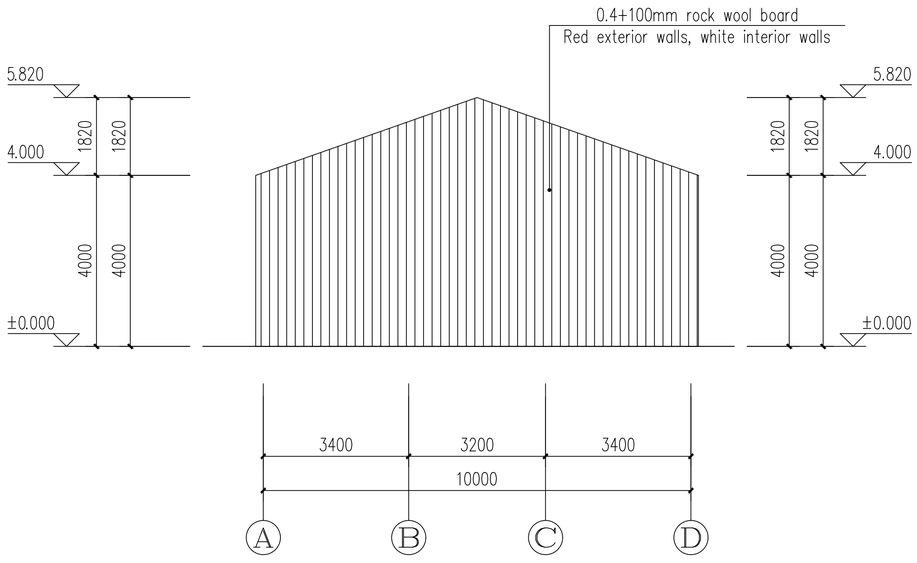
平面示意		KEY PLAN
图 名		TITLE
日 期	2025.12	DATE
图 号	A2	DWG. NO
比 例		SCALE
设计制图人		DRAFTING DESIGNER
工种负责人		DISCIPLINE CHIEF
设计主持人		DESIGN CHIEF
校 对		CHECKED BY
审 核		VERIFIED BY
审 定		APPROVED BY
所 长		DEPT. DIRECTOR
所 别		DEPT.
子 项		SUB ITEM
工程名称		PROJECT

山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

证书号	LICENSE NO.	
设计号	PROJECT NO.	



axial plan view 1:100



axial plan view 1:100

会 签 栏		
专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

平面示意 KEY PLAN

图 名		TITLE
日 期	2025.12	DATE
图 号	A2	DWG. NO
比 例		SCALE
设计制图人		DRAFTING DESIGNER
工种负责人		DISCIPLINE CHIEF
设计主持人		DESIGN CHIEF
校 对		CHECKED BY
审 核		VERIFIED BY
审 定		APPROVED BY
所 长		DEPT. DIRECTOR
所 别		DEPT.
子 项		SUB ITEM
工程名称		PROJECT

山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

证书号	LICENSE NO.	
设计号	PROJECT NO.	

General description of steel structure design

Ⅰ、Project Overview

Project name : Sweden 20*10*4m steel structure building

Warehouse span10m , totle length20m

Cornice height 4m,Roof slope 0.20

Structural system: light portal rigid frame structure

Ⅱ、The safety level of the building structure and the design service life

Building Safety Level: Level 2

Design service life: 50 years

Category of seismic fortification of buildings: Category C

Ⅲ、The relative absolute elevation of ± 0.000 of this project is xxxm

Ⅳ、The standards, norms and procedures followed by the engineering design

1.《Code for Structural Loads on Buildings》 (ASCE 7-16)

2.《Code for seismic design of buildings》 (ASCE 7-16)

3.《Steel structure design standards》 (ASCE 7-16)

4.《Technical specification for cold-formed thin-walled steel structures》 (ASCE 7-16)

5.《Technical specification for steel structure of portal rigid frame light house》(ASCE 7-16)

6.《Gantry rigid frame light house steel member》 (ASCE 7-16)

7.《Design, construction and acceptance procedures for high-strength bolt connections of steel structures》 (ASCE 7-16)

8.《Welding regulations for building steel structures》 (ASCE 7-16)

9.《7th edition of the Florida Building Code》 (2020)

Ⅴ、Design loads

Dead load on the roof : 0.30kN/m2

Calculate the live load of the rigid frame : 0.50kN/m2

Calculate the live load of the purlin : 0.50kN/m2

Snow load : 2.40kN/m2

Ash load : 0.00kN/m2

Design wind speed: 55mph

Ⅵ、The procedure used in this engineering design

Adopt "Steel Structure CAD Software-STS" (10 version V6.0.0) compiled by China Academy of Building Research

Ⅶ、The main structural material

1.Steel :

Steel frame beams, columns, unless otherwise indicated, are made of Q235, purlins and supports using Q235B steel。

2.Bolt :

a.Unless otherwise indicated, the high-strength bolts are all connected with 10.9 friction type high-strength bolts. High-strength bolts should conform to the current national standards "high-strength large hexagonal head bolts for steel structures" GB/T 1228, "high-strength large hexagon nuts for steel structures" GB/T 1229, "high-strength washers for steel structures" GB/T 1230, "Technical conditions for high-strength large hexagonal head bolts, large hexagonal nuts and washers for steel structures" GB/T 1231 or "torsional shear high-strength bolt connection pair for steel structures" GB/T 3632, "Technical conditions for torsional shear high-strength bolt connection pairs for steel structures" GB/T 3633. The design pretension value of high-strength bolts shall be adopted in accordance with the provisions of the "Steel Structure Design Standard" (GB50017-2017). The friction surface treatment of high-strength bolted steel is made of red rust after sandblasting, and the anti-slip coefficient is $\mu \geqslant 0.35$, and should comply with the provisions of the "Design, Construction and Acceptance Regulations for High-strength Bolted Connections of Steel Structures" (JGJ82).

b.Ordinary bolts are grade C

3.Anchors:

Unless otherwise indicated, the anchor bolts are made of Q235 steel, which should comply with the provisions of "Carbon Structural Steel" GB/T 700.

4.Welding materials :

a.The welding rod of manual welding shall comply with the provisions of GB/T 5117 "Carbon Steel Welding Rod" or GB/T 5118 "Low Alloy Steel Welding Rod".

b.The carbon steel welding wire and flux used for submerged arc welding shall comply with the provisions of GB/T 5293 "Carbon for Submerged Arc Welding" and GB/T 14957 "Steel Wire for Melting Welding".

Ⅸ、Processing and production requirements of steel structure

1. The production and installation of steel structure shall be carried out in accordance with the relevant provisions of the Code for Construction and Acceptance of Steel Structure Engineering (GB50205).
2. The steel structure and connecting materials used must have the mechanical (mechanical) properties and chemical composition of the materials.
3. The 30~50mm range on both sides of the weld is not painted temporarily, and the quality inspection should be carried out after the welding is completed.
4. When the steel components leave the factory, the factory shall submit the product qualification certificate, including:

a) the documents of changing the construction drawings,

b) the quality certificate and test report of the steel, connecting materials and coating materials;

c) Beams and columns make quality inspection and acceptance records;

d) Pre-assembly records;

e) Shipping list of components and spare parts, etc.

5. The butt weld should be fully penetrated weld, and the weld quality grade should be inspected according to the second level.
6. The splicing welds of the flange plate and the web of the H-beam should be staggered with each other, and the flange plate is only allowed to be spliced in the length direction.
7. The derusting grade of the portal rigid frame is Sa2 1/2, and the anti-corrosion coating should match the derusting grade.
8. The coating is divided into primer, intermediate and topcoat. The first anti-rust paint must be applied within 4 hours after the steel member is derusted. The total thickness of the coating dry paint film is 75 μm in the chamber.
9. Cold-formed thin-walled steel purlins and wall beams should be processed by hot-dip galvanized strip steel. Its galvanizing capacity is 250g-275g/m2.
10. The strength level required by the design of high-strength bolts should be inspected and re-inspected before construction of the high-strength bolt connection pair (including bolts, nuts and washers), and can be installed only after passing the test. The hardness of 10.9 grade high-strength bolts is not allowed to exceed the upper limit. The torque coefficient must be supplied according to the batch, and the standard deviation of the torque coefficient of the connecting pair should be less than or 0.010. The anti-slip coefficient of the friction surface should be tested to meet the design requirements. When the test value is lower than the design value, the friction surface needs to be re-processed to meet the design requirements. The torsional shear high-strength bolt connection pair focuses on checking whether the tightening axial force meets the design requirements.

Ⅹ、steel structure installation requirements:

1. The installation sequence should start from the two rigid frames supported between the columns near the gable, after the rigid frame is installed, the purlins, supports, pull strips, corner braces, etc. between them should be all installed, and check the verticality and squareness, and then take these two rigid frames as a starting point, install to the other end of the house. The screw should be tightened after calibration. After the rigid frame is adjusted, all high-strength screws should be finally screwed.
2. After the installation of portal rigid frame steel structure, all the supports equipped with tensioning devices should be tensioned, and the tightening degree of support is based on the principle of not bending the components.
3. In the process of steel structure unit and successive installation, the cumulative deviation should be adjusted in time to eliminate the total installation deviation to meet the design requirements. Any mounting hole shall not be arbitrarily cut and expanded, and the diameter of the bolt shall not be changed.
4. Before the installation of the steel column, all column base positions, elevations, axes, anchor bolt positions, and extension lengths should be inspected and accepted.
5. The columns and beams that do not indicate the positioning are centered on the axis.
6. After the column is installed, the anchor bolt backing plate and the column bottom plate must be welded firmly, and the anchor bolt backing plate and the nut must be spot welded, and the spot welding can not damage the anchor base metal.

Ⅺ. Others:

1. The fire protection requirements of the steel structure shall be noted according to the building description.
2. Unless otherwise specified, the size of the construction drawing is in mm, and the elevation is in m.
3. If the general description is inconsistent with the construction drawing, the construction drawing shall prevail.

会 签 栏		
专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

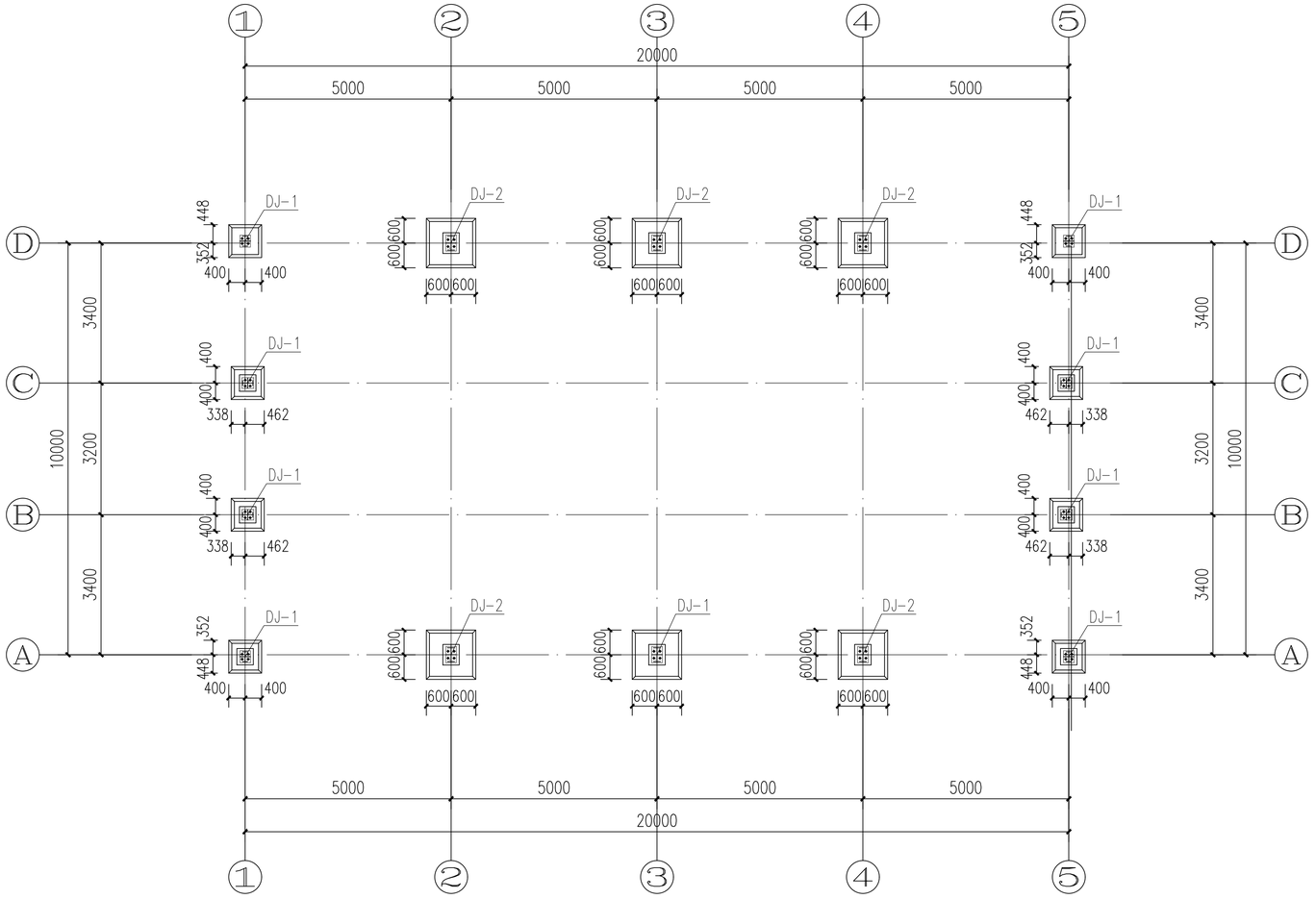
平面示意 KEY PLAN

图 名		TITLE
日 期	2025.12	DATE
图 号	A2	DWG. NO
比 例		SCALE
设计制图人		DRAFTING DESIGNER
工种负责人		DISCIPLINE CHIEF
设计主持人		DESIGN CHIEF
校 对		CHECKED BY
审 核		VERIFIED BY
审 定		APPROVED BY
所 长		DEPT. DIRECTOR
所 别		DEPT.
子 项		SUB ITEM
工程名称		PROJECT

山东聚合钢材有限公司

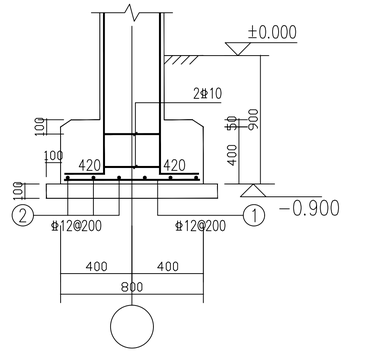
Shandong Juhe Steel Co., LTD

证书号	LICENSE NO.	
设计号	PROJECT NO.	

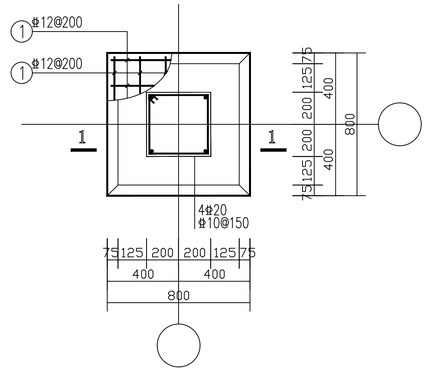


Foundation Layout Plan 1:100

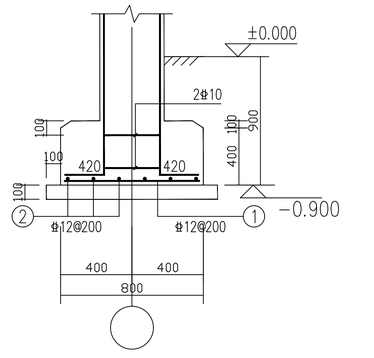
Note:
1.After the steel structure construction unit inspects the position and size of the anchor bolts, measure the anchor bolt elevation with a measuring instrument.
2.Suitable for a foundation bearing capacity of 100 kPa.
3.During basic excavation, proper slope protection and dewatering work must be carried out, lowering the groundwater level to 0.5 meters below the bottom of the trench. Excavation is strictly prohibited during the rainy season.



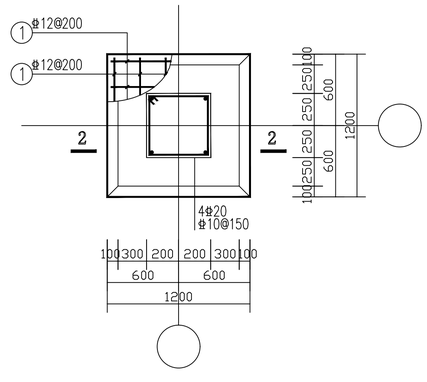
1-1 1:30



DJ-1 1:30



2-2 1:30



DJ-2 1:30

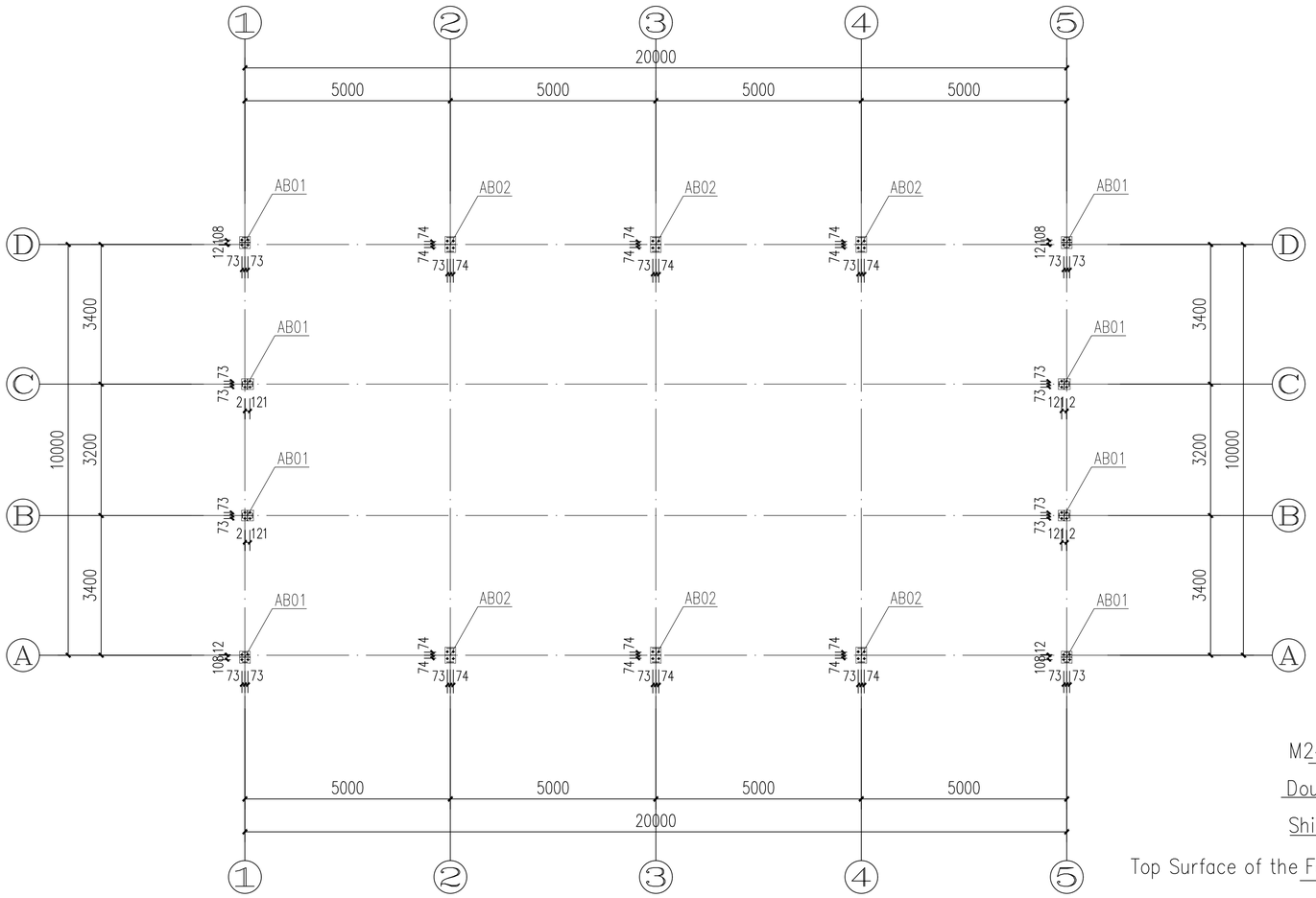
会 签 栏

专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

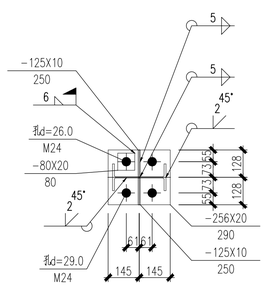
平面示意		KEY PLAN
图 名		TITLE
日 期	2025.12	DATE
图 号	A2	DWG. NO
比 例		SCALE
设计制图人		DRAFTING DESIGNER
工种负责人		DISCIPLINE CHIEF
设计主持人		DESIGN CHIEF
校 对		CHECKED BY
审 核		VERIFIED BY
审 定		APPROVED BY
所 长		DEPT. DIRECTOR
所 别		DEPT.
子 项		SUB ITEM
工程名称		PROJECT

山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

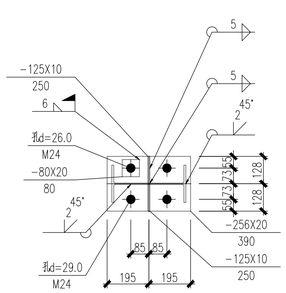
证书号	LICENSE NO.	
设计号	PROJECT NO.	



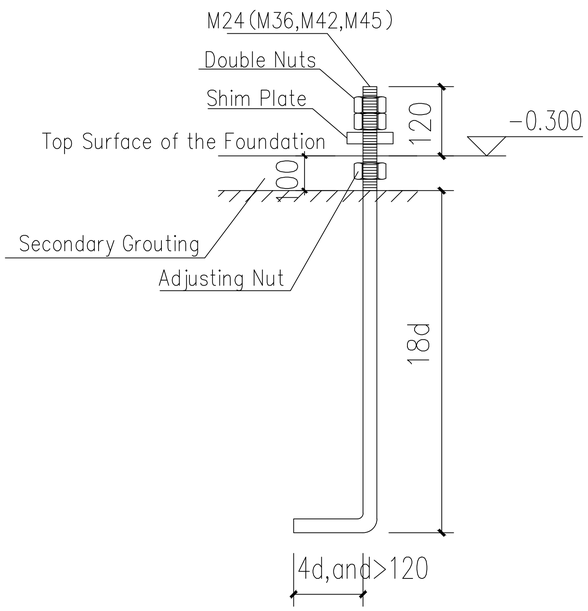
Column base baselayout drawing 1:100



AB01



AB02



Anchor Bolt Detail Drawing 1:100

Q235 Steel (where "d" represents the diameter of the anchor bolt)

会 签 栏

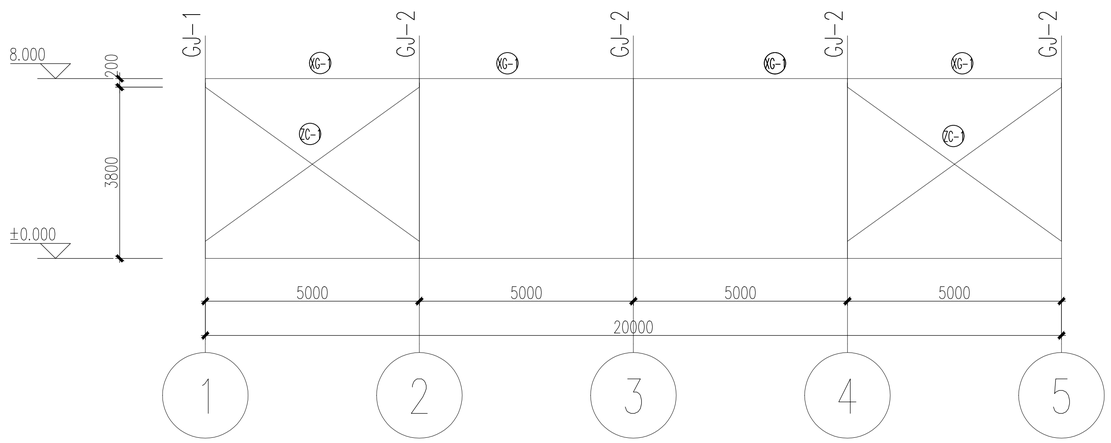
专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

平面示意 KEY PLAN

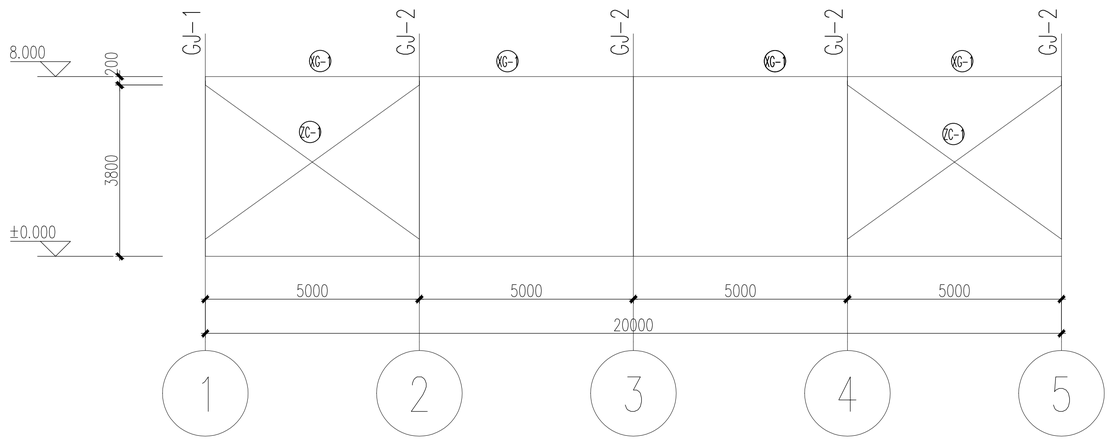
图 名		TITLE
日 期	2025.12	DATE
图 号	A2	DWG. NO
比 例		SCALE
设计制图人		DRAFTING DESIGNER
工种负责人		DISCIPLINE CHIEF
设计主持人		DESIGN CHIEF
校 对		CHECKED BY
审 核		VERIFIED BY
审 定		APPROVED BY
所 长		DEPT. DIRECTOR
所 别		DEPT.
子 项		SUB ITEM
工程名称		PROJECT

山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

证书号	LICENSE NO.	
设计号	PROJECT NO.	



A-axis wall structure drawing 1:100



D-axis wall structure drawing 1:100

Material List

ID	Specification	Material	Note
XG-1	ø76*4	Q235B	
ZC-1	ø20	Q235B	

会 签 栏		
专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

平面示意 KEY PLAN

图 名 TITLE

日 期 2025.12 DATE

图 号 A2 DWG. NO

比 例 SCALE

设计制图人 DRAFTING DESIGNER

工种负责人 DISCIPLINE CHIEF

设计主持人 DESIGN CHIEF

校 对 CHECKED BY

审 核 VERIFIED BY

审 定 APPROVED BY

所 长 DEPT. DIRECTOR

所 别 DEPT.

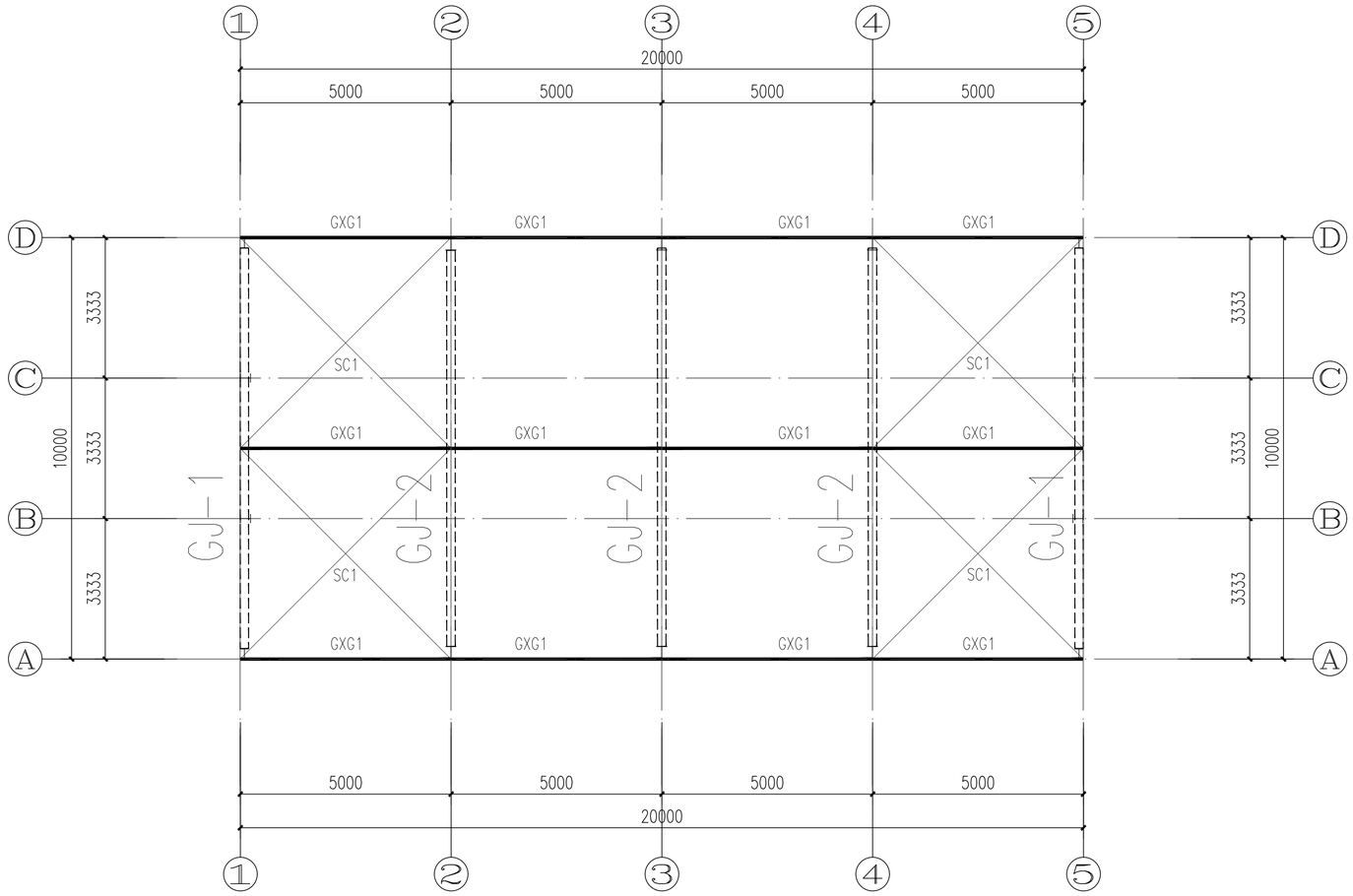
子 项 SUB ITEM

工程名称 PROJECT

山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

证书号 LICENSE NO.

设计号 PROJECT NO.



Roof structure layout drawing 1:100

Material List

ID	Specification	Material	Note
GXG1	ø76*4	Q235B	
SC1	ø20	Q235B	

会 签 栏

专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

平面示意 KEY PLAN

图 名 TITLE

日 期 2025.12 DATE

图 号 A2 DWG. NO

比 例 SCALE

设计制图人 DRAFTING DESIGNER

工种负责人 DISCIPLINE CHIEF

设计主持人 DESIGN CHIEF

校 对 CHECKED BY

审 核 VERIFIED BY

审 定 APPROVED BY

所 长 DEPT. DIRECTOR

所 别 DEPT.

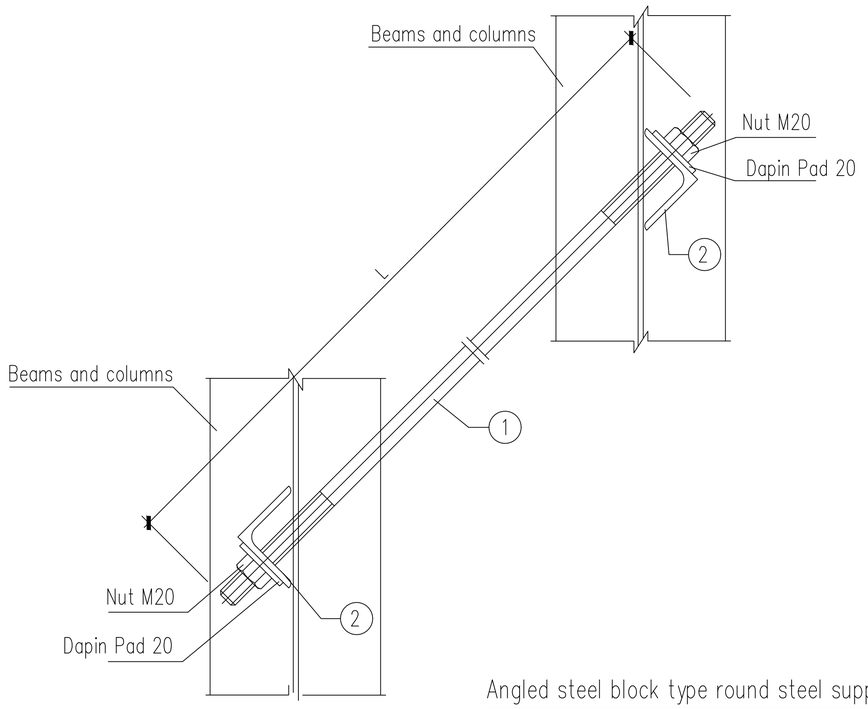
子 项 SUB ITEM

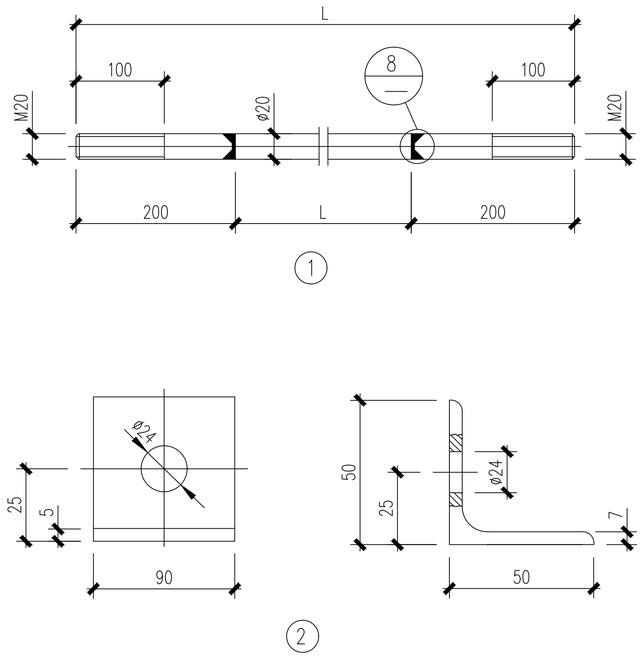
工程名称 PROJECT

山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

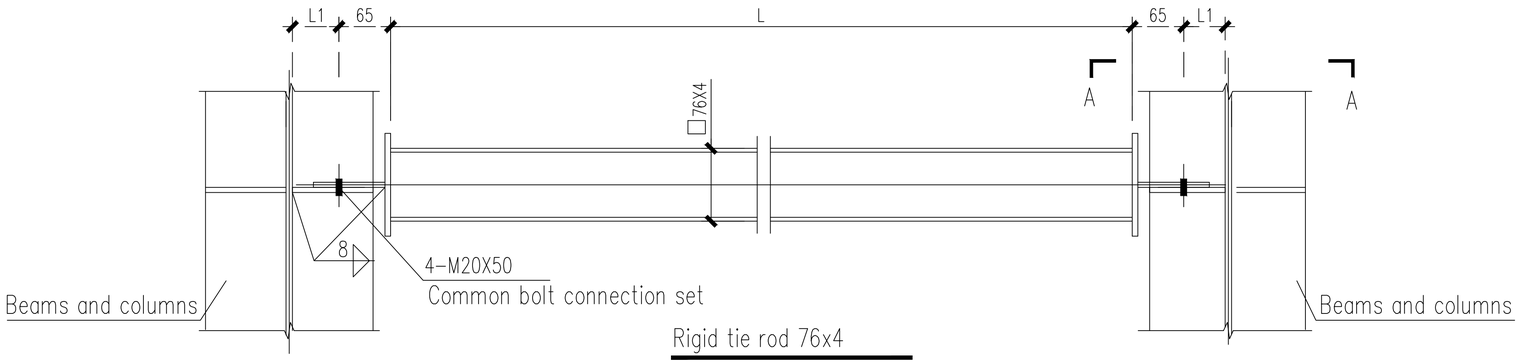
证书号 LICENSE NO.

设计号 PROJECT NO.

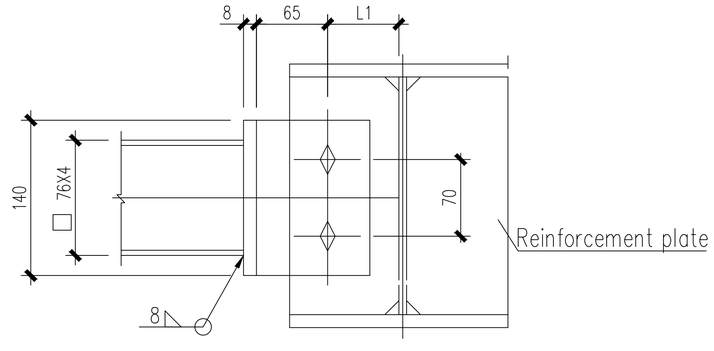




Angled steel block type round steel support BCø20A



Rigid tie rod 76x4



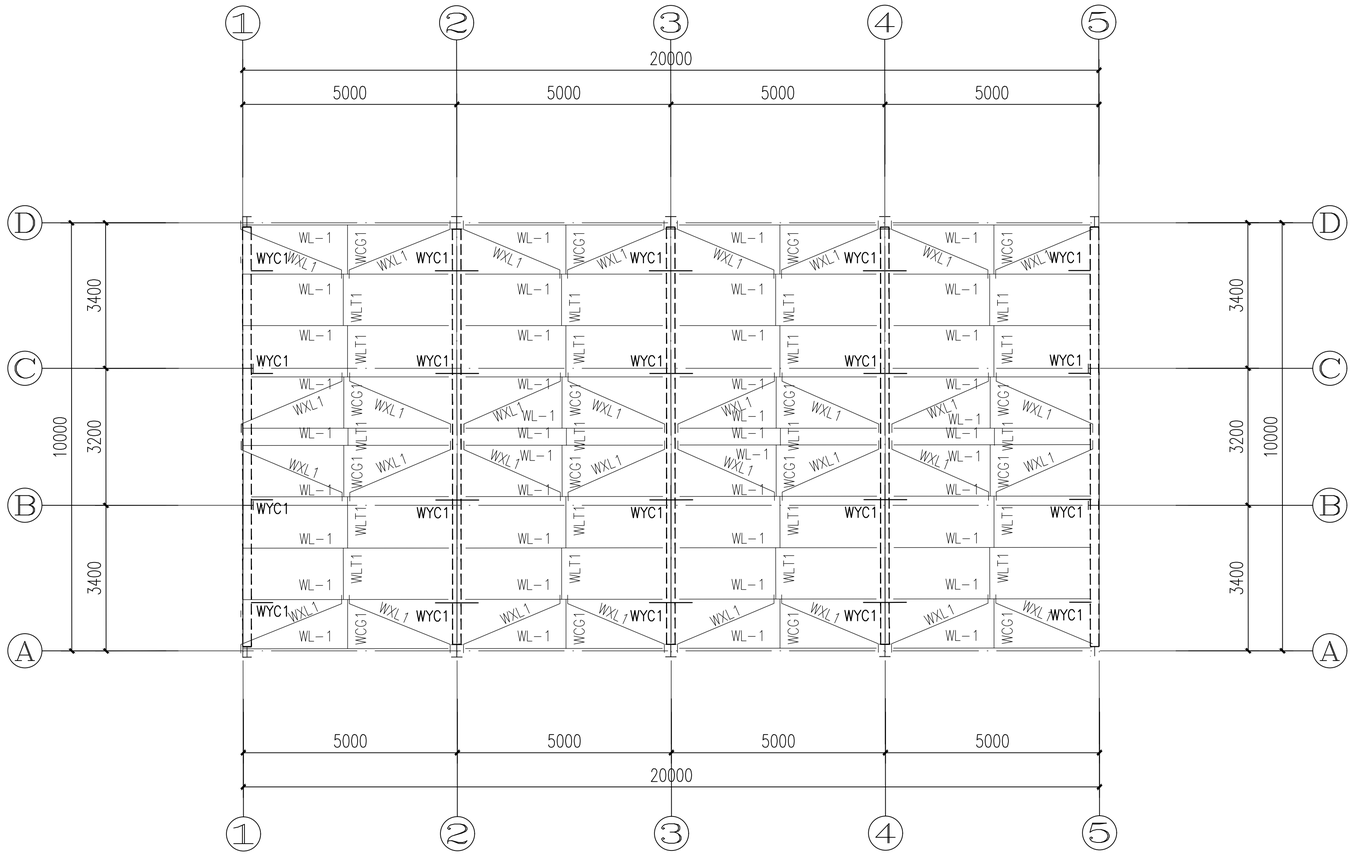
A-A

会 签 栏		
专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

平面示意		KEY PLAN
图 名		TITLE
日 期	2025.12	DATE
图 号	A2	DWG. NO
比 例		SCALE
设计制图人		DRAFTING DESIGNER
工种负责人		DISCIPLINE CHIEF
设计主持人		DESIGN CHIEF
校 对		CHECKED BY
审 核		VERIFIED BY
审 定		APPROVED BY
所 长		DEPT. DIRECTOR
所 别		DEPT.
子 项		SUB ITEM
工程名称		PROJECT

山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

证书号	LICENSE NO.	
设计号	PROJECT NO.	



Roof truss layout drawing 1:100

Material List

ID	Specification	Material	Note
WL-1	C280X70X20X2.5	Q235B	
WCG1	ø32*2.5	Q235B	
WLT1	ø12	Q235B	
WXL1	ø12	Q235B	
YC1	L50*5	Q235B	

会 签 栏

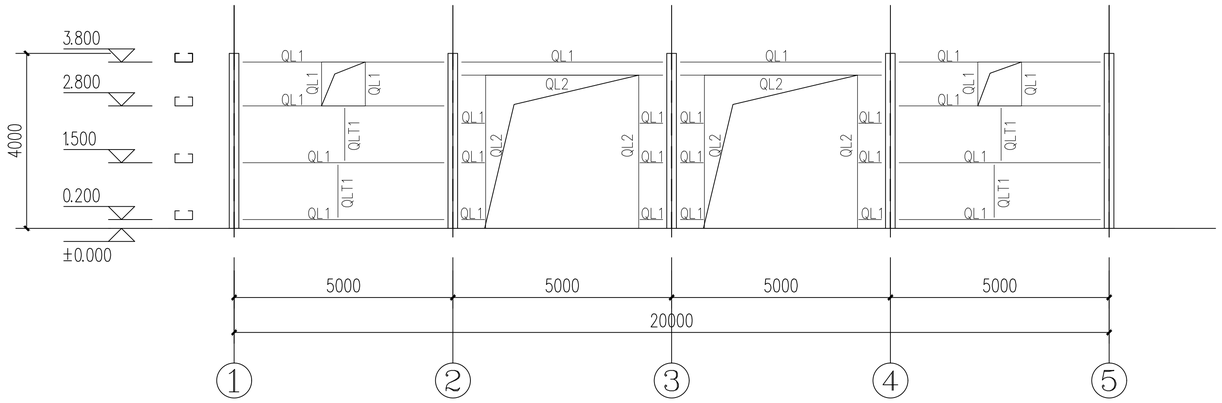
专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

平面示意 KEY PLAN

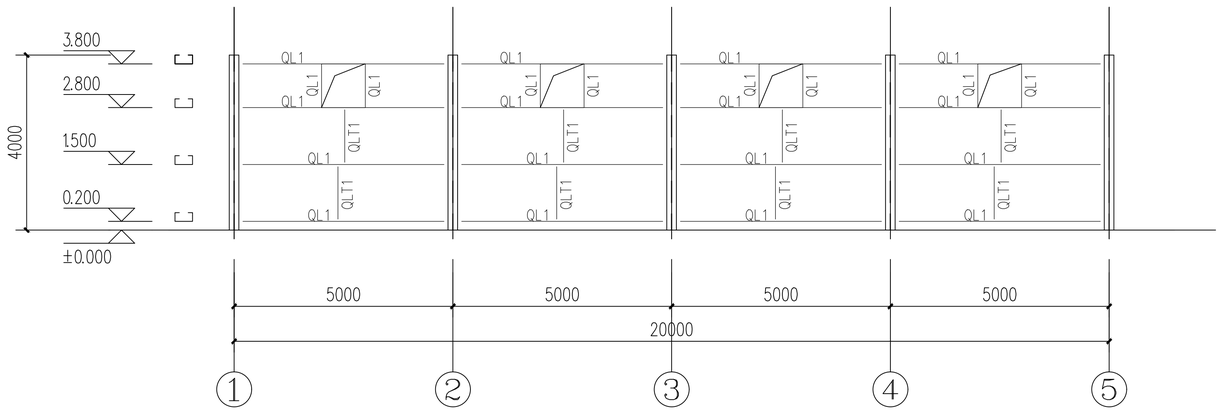
图 名		TITLE
日 期	2025.12	DATE
图 号	A2	DWG. NO
比 例		SCALE
设计制图人		DRAFTING DESIGNER
工种负责人		DISCIPLINE CHIEF
设计主持人		DESIGN CHIEF
校 对		CHECKED BY
审 核		VERIFIED BY
审 定		APPROVED BY
所 长		DEPT. DIRECTOR
所 别		DEPT.
子 项		SUB ITEM
工程名称		PROJECT

山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

证书号 LICENSE NO.	
设计号 PROJECT NO.	



Layout diagram of A-axis wall purlins 1:100



Layout diagram of D-axis wall purlins 1:100

Material List

ID	Specification	Material	Note
QL1	C160X60X20X2.0	Q235B	
QL2	2C160X60X20X2.0	Q235B	
QCG1	ø32*2.5	Q235B	
QLT1	ø12	Q235B	
QXL1	ø12	Q235B	

Notes:
1. QCG is only arranged in the first column of the purlins.
2. Both window frames and door frames need to be double-supported by the purlins. Specific details can be found in the detailed node drawings.

会 签 栏		
专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

平面示意 KEY PLAN

图 名 TITLE

日 期 2025.12 DATE

图 号 A2 DWG. NO

比 例 SCALE

设计制图人 DRAFTING DESIGNER

工种负责人 DISCIPLINE CHIEF

设计主持人 DESIGN CHIEF

校 对 CHECKED BY

审 核 VERIFIED BY

审 定 APPROVED BY

所 长 DEPT. DIRECTOR

所 别 DEPT.

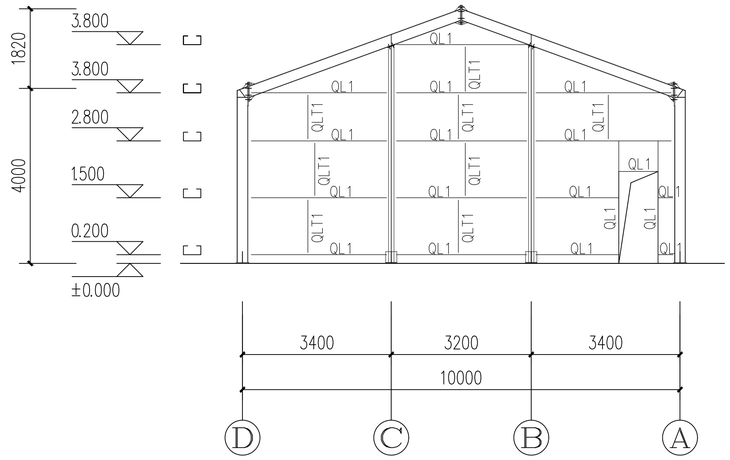
子 项 SUB ITEM

工程名称 PROJECT

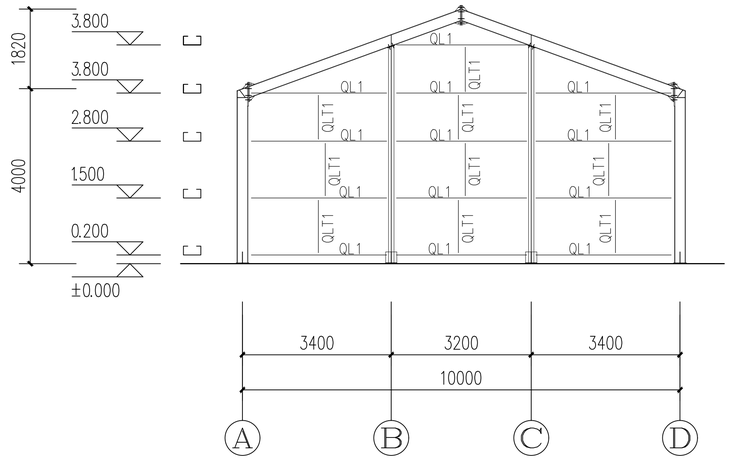
山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

证书号 LICENSE NO.

设计号 PROJECT NO.



Layout diagram of 1-axis wall purlins 1:100



Layout diagram of 5-axis wall purlins 1:100

Material List

ID	Specification	Material	Note
QL1	C160X60X20X2.0	Q235B	
QL2	2C160X60X20X2.0	Q235B	
QCG1	ø32*2.5	Q235B	
QLT1	ø12	Q235B	
QXL1	ø12	Q235B	

Notes:
1. QCG is only arranged in the first column of the purlins.
2. Both window frames and door frames need to be double-supported by the purlins. Specific details can be found in the detailed node drawings.

会 签 栏

专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

平面示意 KEY PLAN

图 名 TITLE

日 期 2025.12 DATE

图 号 A2 DWG. NO

比 例 SCALE

设计制图人 DRAFTING DESIGNER

工种负责人 DISCIPLINE CHIEF

设计主持人 DESIGN CHIEF

校 对 CHECKED BY

审 核 VERIFIED BY

审 定 APPROVED BY

所 长 DEPT. DIRECTOR

所 别 DEPT.

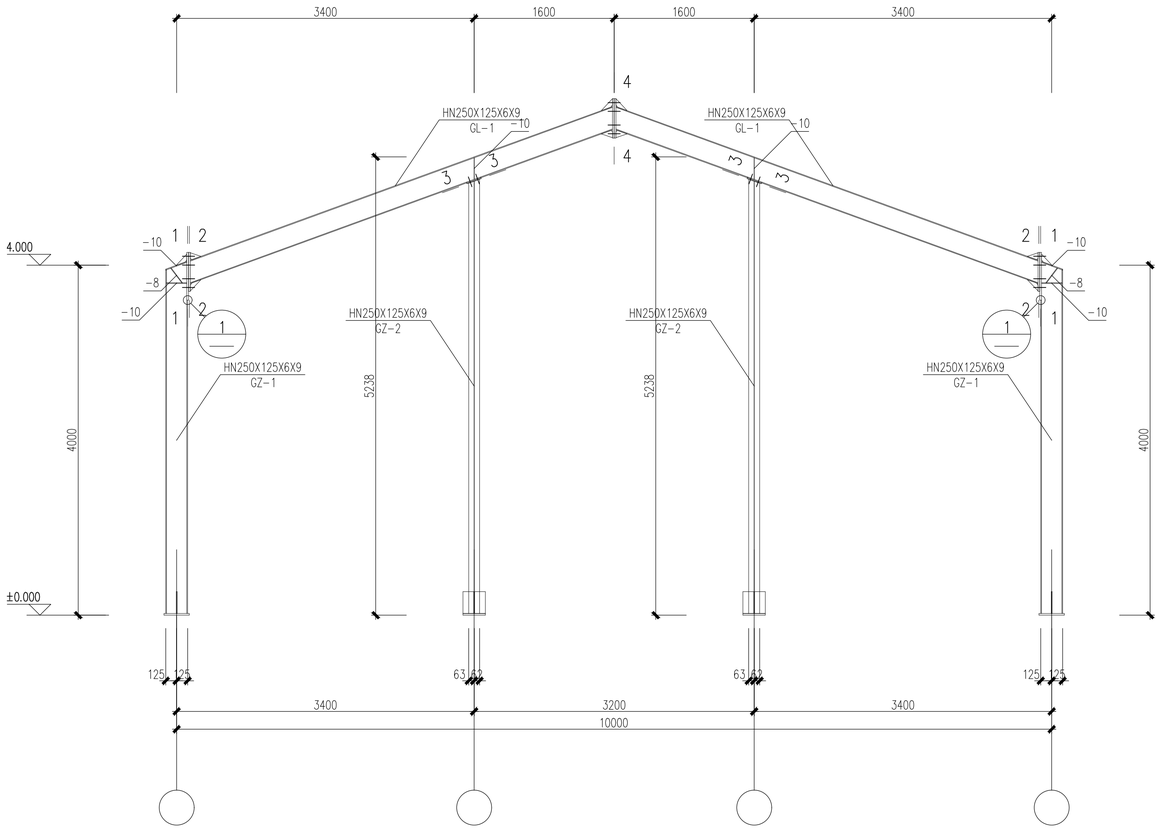
子 项 SUB ITEM

工程名称 PROJECT

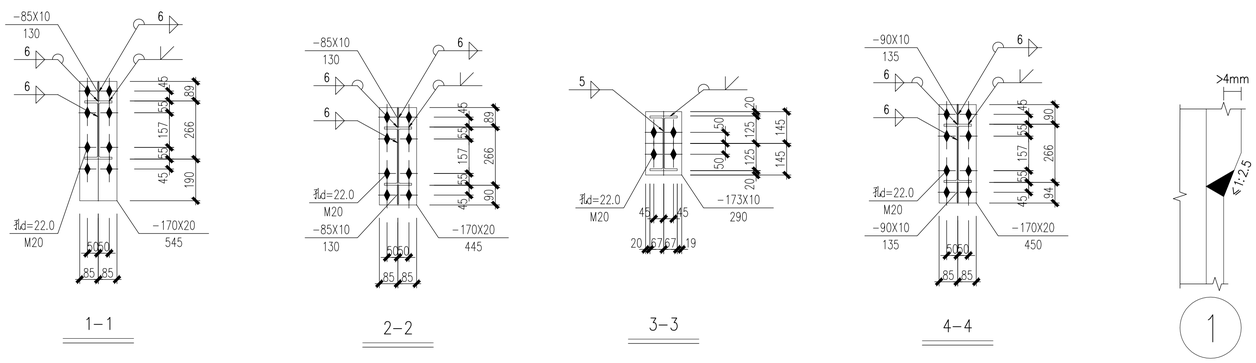
山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

证书号 LICENSE NO.

设计号 PROJECT NO.



GJ-1 1:50



Material List

Beam number	ID	Specification	Material	Note
GJ-1	GZ-1	HN250X125X6X9	Q235B	
	GZ-2	HN250X125X6X9	Q235B	
	GL-1	HN250X125X6X9	Q235B	

Figure Example

High-strength bolt　　Permanent bolt

Installation bolts　　Screw holes

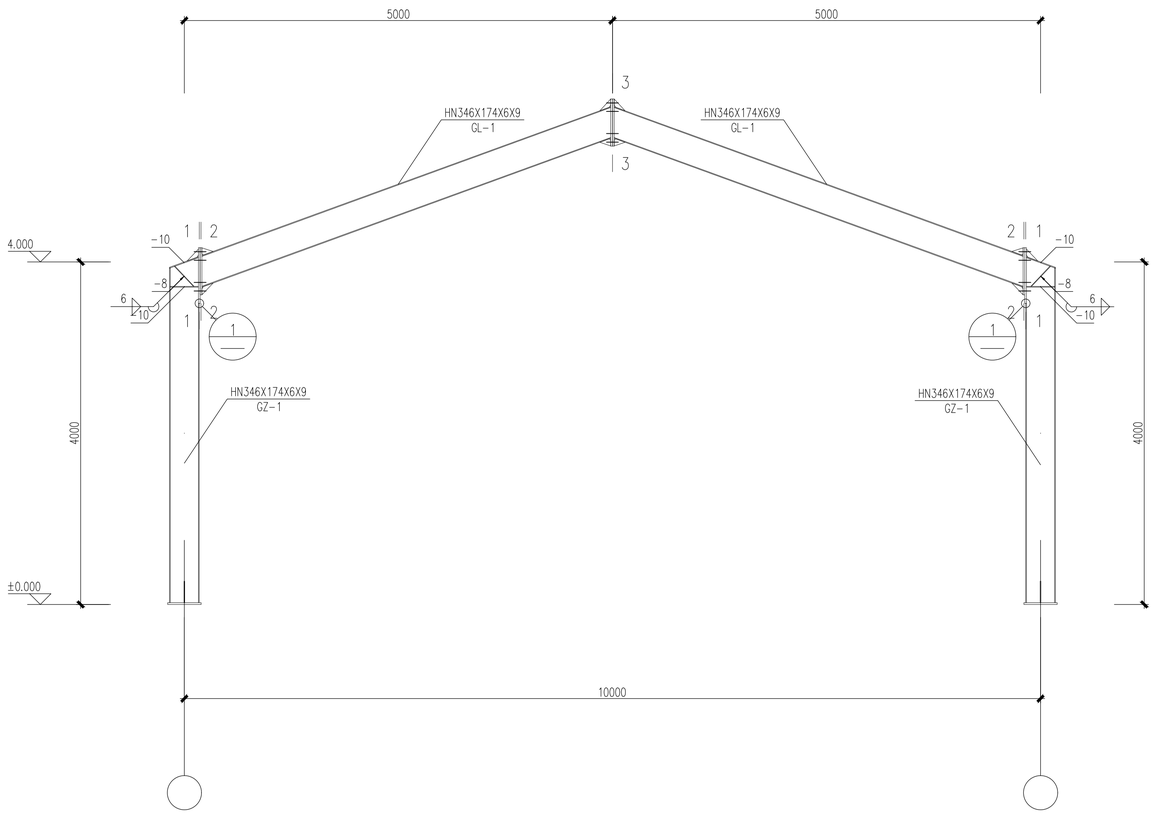
1. Explanation:
   1. This design is carried out in accordance with the steel structure design standard (GB50017-2017);
   2. Materials: For the steel plates and sections that are not specially indicated, they are Q345 steel components. The connection of the steel plates and sections uses 10.9 grade friction-type high-strength bolts, and the treatment of the contact surface is to remove the floating rust with a steel wire brush;
   3. The concrete strength grade of the column foot foundation is C30, and the steel type of the anchor bolts is Q235 steel; the minimum anchorage length la of the anchor bolts is 18*d (the diameter of the anchor bolt);
   4. The minimum weld size of the unmarked fillet welds in the figure is 6mm, and they are all fully welded;
   5. The weld quality of the butt welds is not lower than grade II;
   6. The fabrication and installation of the steel structure should be carried out in accordance with the relevant provisions of the steel structure engineering construction quality acceptance standard (GB50205-2020);
   7. After rust removal of the steel components, two coats of red lead primer are applied, and the fire resistance grade of the components is handled according to the building requirements.

会　签　栏		
专　业	签　字	日　期
总　图		
建　筑		
结　构		
给排水		
暖　通		
动　力		
电　气		
电　讯		

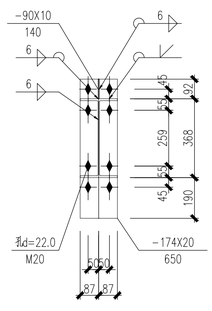
平面示意		KEY PLAN
图　名		TITLE
日　期	2025.12	DATE
图　号	A2	DWG. NO
比　例		SCALE
设计制图人		DRAFTING DESIGNER
工种负责人		DISCIPLINE CHIEF
设计主持人		DESIGN CHIEF
校　对		CHECKED BY
审　核		VERIFIED BY
审　定		APPROVED BY
所　长		DEPT. DIRECTOR
所　别		DEPT.
子　项		SUB ITEM
工程名称		PROJECT

山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

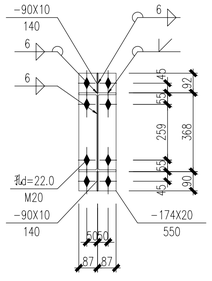
证书号	LICENSE NO.	
设计号	PROJECT NO.	



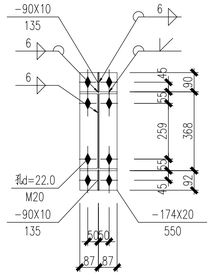
GJ-2 1:50



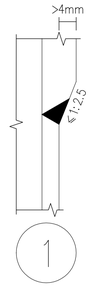
1-1



2-2



3-3



Material List

Beam number	ID	Specification	Material	Note
GJ-2	GZ-1	HN346X174X6X9	Q235B	
	GL-1	HN346X174X6X9	Q235B	

Figure Example

- High-strength bolt
- Permanent bolt
- Installation bolts
- Screw holes

1. Explanation:
   1. This design is carried out in accordance with the steel structure design standard (GB50017-2017);
   2. Materials: For the steel plates and sections that are not specially indicated, they are Q345 steel components. The connection of the steel plates and sections uses 10.9 grade friction-type high-strength bolts, and the treatment of the contact surface is to remove the floating rust with a steel wire brush;
   3. The concrete strength grade of the column foot foundation is C30, and the steel type of the anchor bolts is Q235 steel; the minimum anchorage length la of the anchor bolts is 18*d (the diameter of the anchor bolt);
   4. The minimum weld size of the unmarked fillet welds in the figure is 6mm, and they are all fully welded;
   5. The weld quality of the butt welds is not lower than grade II;
   6. The fabrication and installation of the steel structure should be carried out in accordance with the relevant provisions of the steel structure engineering construction quality acceptance standard (GB50205-2020);
   7. After rust removal of the steel components, two coats of red lead primer are applied, and the fire resistance grade of the components is handled according to the building requirements.

会 签 栏

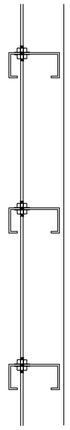
专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

平面示意 KEY PLAN

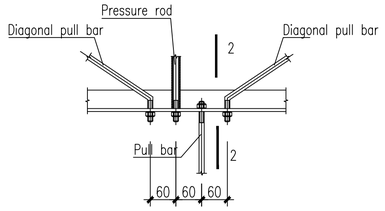
图 名		TITLE
日 期	2025.12	DATE
图 号	A2	DWG. NO
比 例		SCALE
设计制图人		DRAFTING DESIGNER
工种负责人		DISCIPLINE CHIEF
设计主持人		DESIGN CHIEF
校 对		CHECKED BY
审 核		VERIFIED BY
审 定		APPROVED BY
所 长		DEPT. DIRECTOR
所 别		DEPT.
子 项		SUB ITEM
工程名称		PROJECT

山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

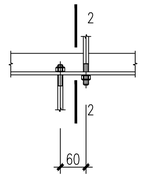
证书号	LICENSE NO.	
设计号	PROJECT NO.	



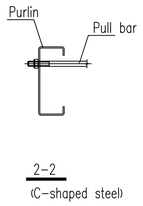
Wall tie strips connect the nodes



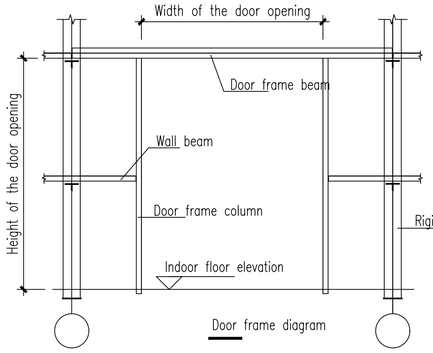
The diagonal pull bars connect the nodes



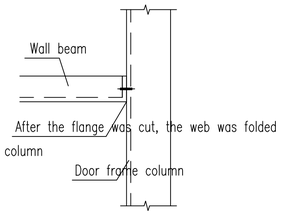
The straight pull bar connects the nodes



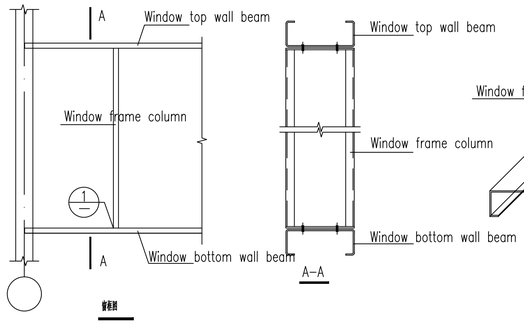
2-2
(C-shaped steel)



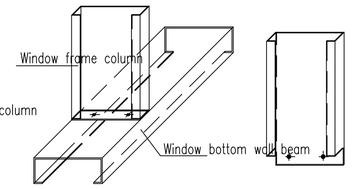
Door frame diagram



Wall beam Door frame column

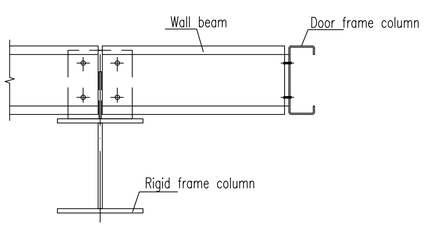


A-A

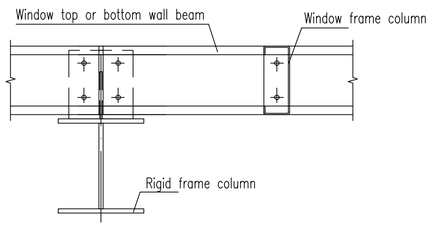


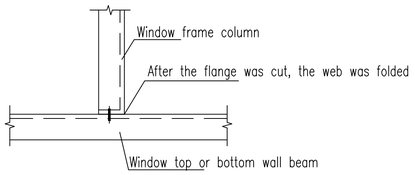
1

Illustration of the end cutting of the window frame column

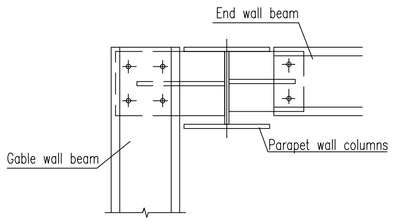


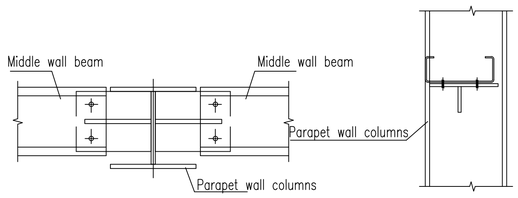
Connection nodes between wall beams and door frame columns



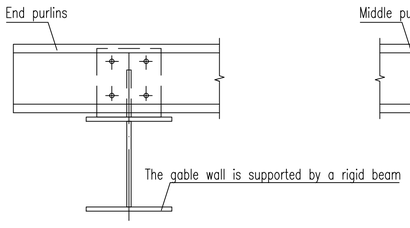


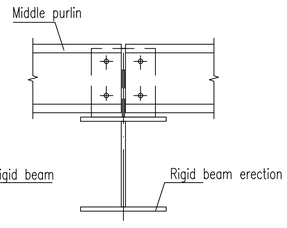
Connection nodes between window frame columns and wall beams

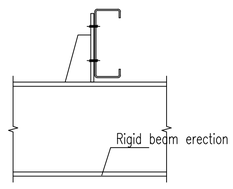




The connection node between the C-shaped wall beam and the parapet wall column







Connection nodes between C-shaped purlins and roof beams

会 签 栏		
专 业	签 字	日 期
总 图		
建 筑		
结 构		
给排水		
暖 通		
动 力		
电 气		
电 讯		

平面示意 KEY PLAN

图 名		TITLE
日 期	2025.12	DATE
图 号	A2	DWG. NO
比 例		SCALE
设计制图人		DRAFTING DESIGNER
工种负责人		DISCIPLINE CHIEF
设计主持人		DESIGN CHIEF
校 对		CHECKED BY
审 核		VERIFIED BY
审 定		APPROVED BY
所 长		DEPT. DIRECTOR
所 别		DEPT.
子 项		SUB ITEM
工程名称		PROJECT

山东聚合钢材有限公司
Shandong Juhe Steel Co., LTD

证书号	LICENSE NO.	
设计号	PROJECT NO.	