O'ZBEKISTON RESPUBLIKASI
ANDIJON VILOYATI ANDIJON SHAHRI
"NORMA QURILISH KONSALTING" MCHJ

17 o'rinli xojatxona va o'tish binosi qurilishi uchun

Ishchi loyiha

2-Albom

Loyiha tarkibi:

Qurilish yechimi.

"Norma qurilish konsalting" MChJ

Loyiha bosh muhandisi: To'raboyev Sh.

Andijon - 2026 yil

LBM	To'raboyev Sh.			"Norma qurilish konsalting" MChJ
Texnolog				
Bajardi	Isomiddinov A.			
Bajardi				Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish
Bajardi				

Ishchi chizmalarning asosiy to'plamlari ro'yxati

Belgilash	Nomi	Eslatma
AQ	Qurilish qismi chizmalari	2-Albom

AQ asosiy to'plamining ishchi rasmlari ro'yxati

Varaq	Nomi	Eslatma
1	Umumiy ma'lumot (boshlandi).	
2	Umumiy ma'lumot (tugadi).	
3	Poydevor rejasi. Qirqim 1-1, A-A.	
4	Poydevor rejasi xarajatlar jadvali.	
5	Xandaq tomyopma rejasi. Xandaq tomyopma rejasi xarajatlar jadvali. Quyma rigel Qr1.	
6	Devorni mustahkamlash elementlarini joylashtirish rejasi va xarajatlar jadvali.	
7	Rama Rm1. Xarajatlar jadvali. Fazoviy karkas Fk1. 1-1, 2-2, 3-3, 4-4.	
8	Fazoviy karkas Fk2, Fk3, Fk4. To'g'ri karkas Tk1, Tk2.	
9	Rama Rm2. Xarajatlar jadvali. Fazoviy karkas Fk1, Fk2. 1-1, 2-2, 3-3, 4-4.	
10	Pardadevorlarni kuchaytirishning xarajatlar jadvali. 1.2.3 tugunlar.	
11	D,E o'qlarida 1-4 o'qlari bo'ylab, 3,4 o'qlarda E-A o'qlari bo'ylab devor yoyilmasi.	
12	3,220 metr balandlikdagi tomyopma rejasi va xarajatlar jadvali.	
13	Parapetni mustahkamlash elementlarini joylashtirish rejasi va xarajatlar jadvali.	
14	Chordoq to'sinlarini joylashtirish rejasi va xarajatlar jadvali.	
15	1-tugun. Suv yig'ish kanali elementlari xarajatlar jadvali	
16	A,B,V tugunlar. A-A, B-B, G-G kesimlar.	
17	Metall soyabon Ms1. Xarajatlar jadvali.	

UMUMIY QISM

Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish ishlari bo'yicha loyiha-smeta xujjatlari to'plami "Norma qurilish konsalting" MCHJ tashkiloti tomonidan ishlab chiqilgan. Buyurtmachi Andijon viloyati xokimligi huzuridagi "Yagona buyurtmachi xizmati" Injiniring kompaniyasi tomonidan 2026 yilda yuborilgan loyiha-smeta xujjatlarini tayyorlash uchun buyurtma xati, Andijon viloyati Arxitektura va Qurilish Bosh Boshqarmasi tomonidan 2026.06.30 yil sanasida berilgan ART 1703-1703224-274649 -son loyiha ishlarini bajarish uchun topshiriq va mavjud bino va inshootlarni xozirgi kundagi texnik xolati buyicha Andijon viloyati "Davlat Arxitektura va Qurilish Nazorati" tomonidan 18.05.2026 yil sanasida berilgan TX-107 xulosasiga asosan tayyorlandi.

Ishchi loyihani ishlab chiqish amaldagi me'yoriy talablariga muvofiq amalga oshirildi.

QURILISH YECHIMI

Bino ramali konstruktiv yechimda bo'ylama va ko'ndalang devorlari qalinligi 300mm bo'lgan gazoblokdan terilgan.

Bino quyidagi konstruktiv elementlardan qurilgan:

Poydevorlar - tasmasimon bo'lib V15 sinfli betondan quyilgan. Taglik armatura karkaslari bilan kuchaytirilgan.

Tashqi devorlar qalinligi 300mm bo'lgan gazoblokdan M50 markali g'ishtga yopishqoqligini oshiruvchi qo'shimchalar bilan boyitilgan qorishmada bo'ylamasiga 600mm qadamda armatura setkasi bilan kuchaytirilgan holda urilgan.

Tashqi pardozlash - binoning barcha tashqi ko'rinishida gips tarkibli suvoq ishlari bajarilsin, ustidan travertin kukunidan suvoq ishlari bajarilsin.

Ichki pardozlash - Barcha loyihalangan devorlar va pardadevorlar gips tarkibli suvoq ishlari amalga oshiriladi, ichki pardozlash ishlari ro'yxatiga muvofiq keramik sirlangan plitkalar bilan qoplanadi.

Pardadevorlar - qalinligi 120 mm, gazoblokdan M50 markali g'ishtga yopishqoqligini oshiruvchi qo'shimchalar bilan boyitilgan qorishmada bo'ylamasiga 600mm qadamda armatura setkasi bilan kuchaytirilgan holda urilsin.

Texnik -iqtisodiy ko'rsatkichlar:

Qurilish maydoni - 92,96 m2

Qurilish hajmi - 686,04 m3

Imzo

Umumiy maydoni – 79,39 m2

Ishchi loyiha amaldagi qonun va qoidalarga muvofiq ishlab chiqilgan. Loyihada binolarni ishlatish paytida portlovchi, portlash va yong'in xavfsizligini ta'minlash choralarini nazarda tutadi.

Loyihaning bosh muhandisi: To'raboyev Sh.

o'zg.	soni	varaq	xuj.№	imzo	sana	Shifr: AQ-		
						Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish		
LBM		To'raboyev Sh				17 o'rinli xojatxona va o'tish yo'lagi	bosqich: IL	varaq: 1 / varaqlar: 17
bajardi		Isomiddinov A.				Umumiy ma'lumot (boshlandi)	"Norma qurilish konsalting" MChJ	

Quyma ramalar – B25 sinfli monolitik betondan tayyorlangan, armatura karkaslari bilan mustahkamlangan.

Rigellar – B25 sinfli monolitik betondan tayyorlangan, armatura karkaslari bilan mustahkamlangan.

Sarbastalar – 1.038.1.– 1–sonli seriya bo'yicha prefabrik temir–beton va B15 sinfli monolitik betondan tayyorlangan, armatura karkaslari bilan mustahkamlangan.

Tomyopma – UTR46.1–95 1–soniga muvofiq yig'ma ko'pbo'shliqli temir–beton plitalardan.

Pollar – keramik plitkalardan 2.244–1 seriyali 4–son bo'yicha bajarilsin.

Deraza bloklari – RSTUz699–96 bo'yicha ko'p kamerali plastik materialdan tayyorlangan (2qavat oynali).Tashqi eshik bloklari – RSTUz 699–96 bo'yicha ko'p kamerali plastik materialdan tayyorlangan (2qavat oynali). Barcha eshik bloklari ostonasiz o'rnatiladi.

Ichki eshik bloklari – RSTUz 699–96 bo'yicha ko'p kamerali plastik materialdan (2qavat oynali) ostonasiz o'rnatiladi.

Izolyatsiya – 100mm qalinlikdagi mineral paxtadan.

Tom – metall konstruktsiyalarda b=0,51 mm polimer qoplamali profnastildan.

Sokol – kabanchik metall karkaslar bilan o'rnatilsin.

Devor osti to'shama – binoning perimetri bo'ylab kengligi 1000mm, asosi 50mm zichlashtiriilgan shag'al, qalinligi 100mm beton to'shama bajarilsin.

Yong'inga qarshi chora–tadbirlar

Loyiha SHNK 2.08.02–09 va SHNK 2.01.02–04 amaldagi qurilish normalari va qoidalariga muvofiq ishlab chiqilgan.

II darajali yong'inga chidamlilik binosi avtomatik yong'in signalizatsiyasi bilan jihozlangan.

Loyiha shamollatish tizimlarini boshqaruv panelidan markazlashtirilgan tarzda o'chirishni, shuningdek, ushbu tizimlarni yong'in haqida avtomatik xabar berish tizimidan bloklashni qabul qildi.

Kabellar va quvurlarni o'rab turgan tuzilmalar orqali yotqizishda yonmaydigan materiallardan yasalgan yenglar ta'minlanadi. Yeng va quvur orasidagi bo'shliqni kamida 15 mm yonmaydigan material bilan to'ldiring.

Bino birlamchi yong'in o'chirish uskunalari bilan jihozlangan: OP–10A kukunli o't o'chirish moslamalari, bochkalar, chelaklar, ilgaklar, bolталar.

QO'LLANISH MAYDONI

Bino IVg iqlim mintaqasida qurish uchun mo'ljallangan, har bir cho'kish uchun 8 ball seysmiklik bilan.

1–turdagi tuproqlar.

Seysmik xossalari bo'yicha tuproqlar toifasi uchinchi o'rinda turadi.

Taxminiy qishki tashqi havo harorati –14 C.

Qor hududi –I KMK2.01.07–96 bo'yicha.

Qor qoplamining og'irligi – 50kgf / m2.

Yuqori tezlikdagi shamol bosimi 38kgf / m2 ni tashkil qiladi.

Mas'uliyatni shakllantirish I sinf

Binoning yong'inga chidamliligi – II

Binoning chidamliligi II darajasi

"AL–MUSAVVIR" MChJ tomonidan 2021 yilda olib borilgan qurilish maydonchasining muhandislik–geologik sharoitlari bo'yicha xulosaga ko'ra, qurilish maydonchasidagi tuproqlar quyidagicha:

– Qalinligi 0,4 – 0,7 m bo'lgan quyma tuproq.

– IGE №1 – qalinligi – 2,0 – 2,20 m gacha bo'lgan qumloqlar.

Poydevorlar IGE № 1 tuproqlar – cho'kma 1–turdagi tuproqlar asosida quriladi.Tabiiy tuproqlarning fizik–mexanik xususiyatlari:

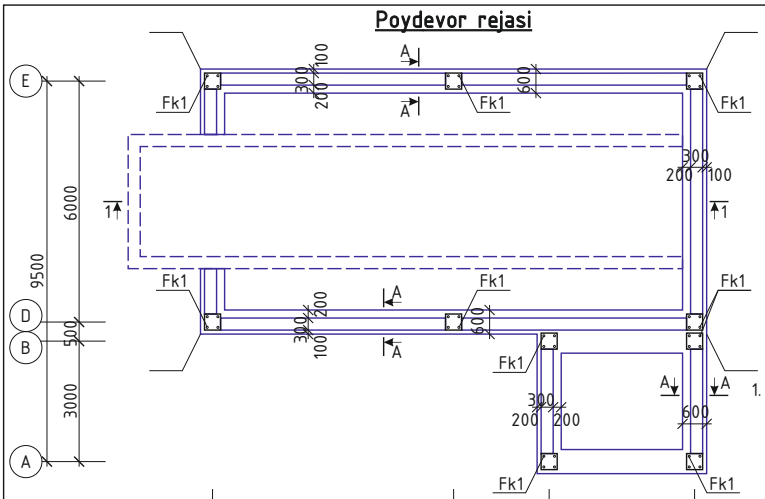
a = 0,85 bilan: y = 1,90 t / m3; u = 23 00 /; s = 7,0 kPa;

Tuproqlar portlend tsementidagi normal zichlikdagi betonlarga juda agressivdir.

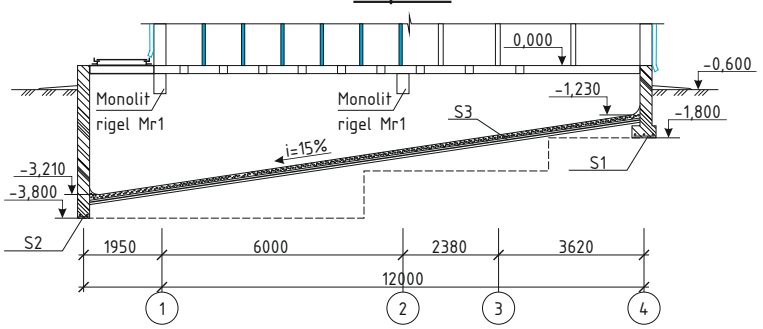
Tadqiqot davrida yer yuzasidan 1,8–2,2 m gacha chuqurlikda yer osti suvlari topilgan.

o'zg.	soni	varaq	xuj.№	imzo	sana	Shifr: AQ-		
						Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish		
LBM		To'raboyev Sh				17 o'rinli xojatxona va o'tish yo'lagi	bosqich: IL	varaq: 2 / varaqlar: 17
bajardi		Isomiddinov A.				Umumiy ma'lumot (tugadi)	"Norma qurilish konsalting" MChJ	

Poydevor rejasi



Qirqim 1–1

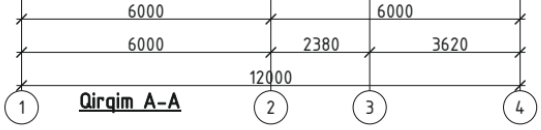


1. Poydevorlarning asosini – SUGLINOK 1 –turdagi cho'kma tuproqlar tashkil qiladi quyidagi fizika–mexanik xususiyatlarga ega.

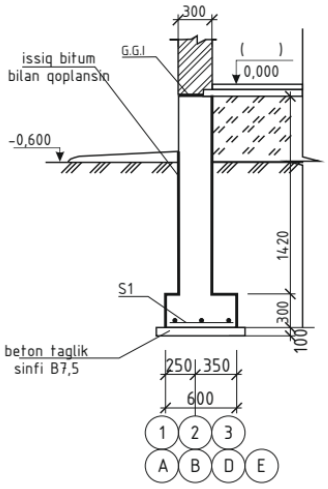
a = 0,85; y = 1.68t / m3; u = 23 ; s = 9,0 kPa (0,90 t/m2.)

Tadqiqot davrida yer osti suvlari yer sathidan 1,8–2,2 m chuqurlikda topilgan.

Tuproqlarning seysmik toifasi uchinchi hisoblanadi.



Qirqim A-A



2. Maydonning seysmikligi ball.
3. Poydevorlarni qurish uchun -4.200 darajagacha chuqur ochilsin va tuproqning hajmi kamida 1,6 t/m3 gacha zichlashtirilsin.
4. Poydevor ostida beton sinfi B7,5 qalinligi 100mm bo'lgsn quyma beton taglik amalga oshirilsin. Beton taglikning yuqori qismi 2 marta issiq bitum bilan qoplansin.
5. Gorizontal gidroizolyatsiya qalinligi 30 mm bo'lgan 1:3 sement qorishmasidan tayyorlanishi kerak.
6. Yer bilan tutashgan barcha yer osti beton va temir-beton konstruktsiyalar 2 marta issiq bitum bilan qoplansin.
7. Bino atrofi - 100mm shag'al asos, kengligi 1000mm bo'lgan 50mm qalinlikdagi beton to'shama bilan qoplansin.
8. Karkaslarni payvandlash RSTUz865-98 bo'yicha E-50A tipidagi elektrodlar yordamida amalga oshirilishi kerak, payvandlangan choklarning balandligi elementlarning qalinligidan kam bo'lmasligi kerak.
9. Bu varaq AQ- varag'i bilan birgalikda o'qilsin.

o'zg.	soni	varaq	xuj.№	imzo	sana	Shifr: AQ-		
						Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish		
LBM		To'raboyev Sh				17 o'rinli xojatxona va o'tish yo'lagi	bosqich: IL	varaq: 3 / varaqlar: 17
bajardi		Isomiddinov A.				Poydevor rejasi. A-A, 1-1 qirqimlar.	"Norma qurilish konsalting" MChJ	

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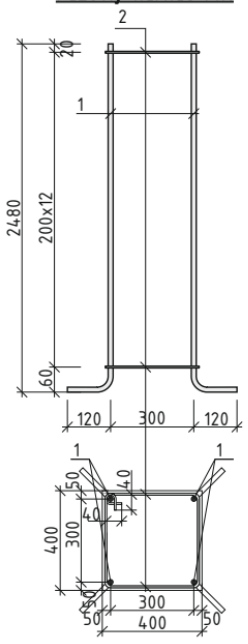
Fazoviy karkas Fk1



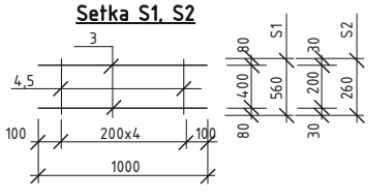
Poydevor rejasi xarajatlar jadvali

belgi	belgilash	nomi	soni	og'irligi kg	eslatma
Fk1	AQ- varaq	Fazoviy karkas Fk1	10	46,93kg	dona
S1	AQ- varaq	Setka S1	45,9	2,376kg	m
S2	AQ- varaq	Setka S2	30,94	2,076kg	m
S3	AQ- varaq	Setka S3 $\frac{5Bpl-100}{5Bpl-100}$ L=umumiy	46,1	3,08	m2
		B15 sinfli beton			m^3
	(1dona uchun xarajat)	Fazoviy karkas Fk1			46,93kg
1	GOST 5781-82*	Φ25 AIII L=2600	4	10,01	40,04kg
2	GOST 5781-82*	Φ8 AI L=1350	13	0,53	6,89kg
	(1metr uchun xarajat)	Setka S1			2,376kg
3	GOST 5781-82*	Φ12 AIII L=1000	2	0,888	1,776kg
4	GOST 5781-82*	Φ6 AI L=560	5	0,12	0,6kg
	(1metr uchun xarajat)	Setka S2			2,076kg
3	GOST 5781-82*	Φ12 AIII L=1000	2	0,888	1,776kg
5	GOST 5781-82*	Φ6 AI L=260	5	0,06	0,3kg

ASOS ELEMENTLARINI TANLASH

Elementlar nomi	Beton mahsulotlari		Armatura mahsulotlari								JAMI
			Armatura sinfi								
			A-I				A-III				
			GOST 5781-82*								
	Beton sinfi	m3	Φ6	Φ8		Итого	Φ12	Φ16	Φ25	Итого	
Tasmasimon quyma poydevor	B15	56,15	-	-		-	136,47	-	-	136,47	
Fazoviy karkaslar			-	68,9		68,9	-	-	400,4	400,4	
To'g'ri karkas			36,82	-		36,82	-	-	-	-	
JAMI:						105,72				536,87	642,59

Setka S1, S2



o'zg.	soni	varaq	xuj.№	imzo	sana	Shifr: AQ-		
						Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish		
LBM		To'raboyev Sh				17 o'rinli xojatxona va o'tish yo'lagi	bosqich: IL	varaq: 4 / varaqlar: 17
bajardi		Isomiddinov A.				Poydevor rejasi xarajatlar jadvali. Karkaslar Fk1, S1,2.	"Norma qurilish konsalting" MChJ	

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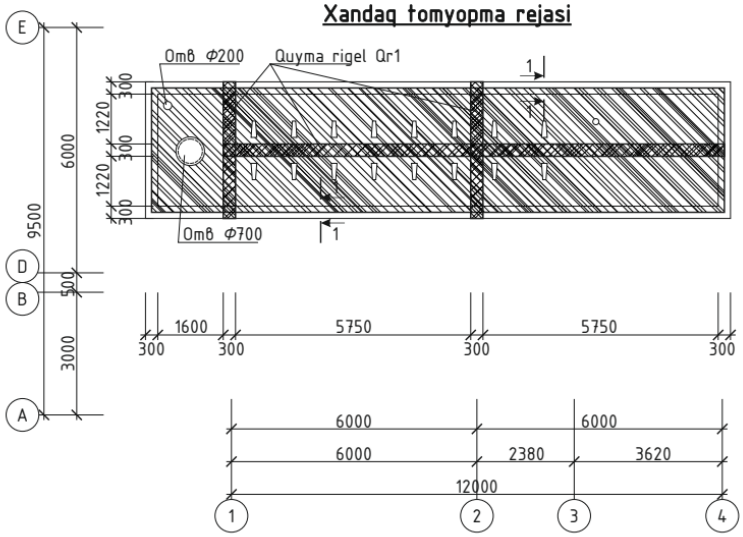
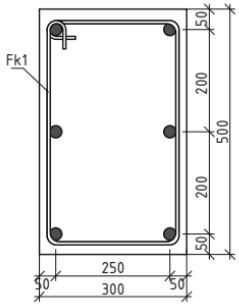
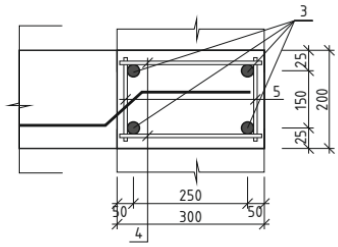
Xandaq tomyopma rejasi



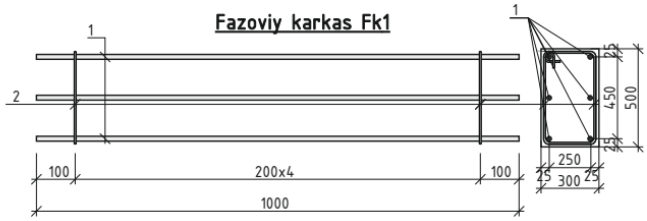
Quyma rigel Qr1



Sechenie 1-1



Fazoviy karkas Fk1



Xandaq tomyopma rejasi xarajatlar jadvali

belgi	belgilash	nomi	soni	og'irligi kg	eslatma
Mr1	AQ- varaq	Monolit rigel Mr1	18,93	16,49kg	m
Sech1	AQ- varaq	Sechenie Sech1	34,08	4,05kg	m
S1	AQ- varaq	Setka S1 $\frac{12AIII-100}{12AIII-100}$ L=umumiy	42,56	17,76	m2
		B15 sinfli beton			m^3
	(1metr uchun xarajat)	Monolit rigel Mr1		16,49kg	
Fk1	AQ- varaq	Fazoviy karkas Fk1	1	16,49kg	dona
		B15 sinfli beton	0,15		m^3
	(1metr uchun xarajat)	Fazoviy karkas Fk1			16,49kg
1	GOST 5781-82*	Φ20 AIII L=1000	6	2,47	14,82kg
2	GOST 5781-82*	Φ6 AI L=1500	5	0,333	1,67kg
	(1metr uchun xarajat)	Sechenie Sech1			4,05kg
3	GOST 5781-82*	Φ10 AIII L=1000	4	0,888	3,55kg
4	GOST 5781-82*	Φ6 AI L=280	5	0,06	0,3kg
5	GOST 5781-82*	Φ6 AI L=180	5	0,04	0,2kg

o'zg.	soni	varaq	xuj.№	imzo	sana
LBM		To'raboyev Sh			
bajardi		Isomiddinov A.			

Shifr: AQ-

Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish

17 o'rinli xojatxona va o'tish yo'lagi

bosqich	varaq	varaqlar
IL	5	17

Poydevor rejasi xarajatlar jadvali. Karkaslar Fk1, Tk1, S1,2.

"Norma qurilish konsalting" MChJ

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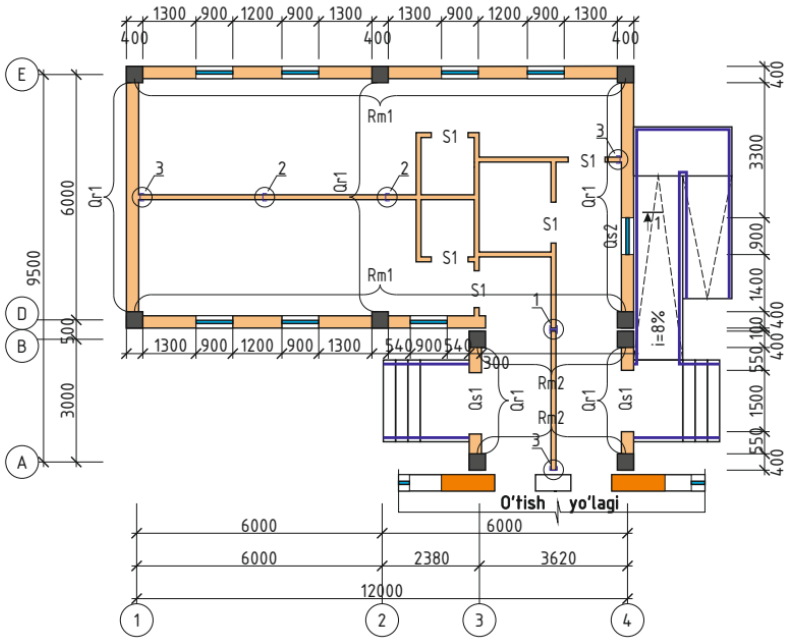
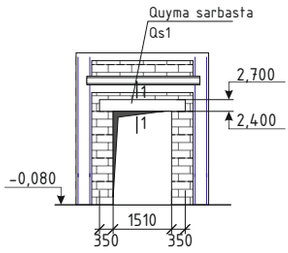
Devorni mustahkamlash elementlarini joylashtirish rejasi



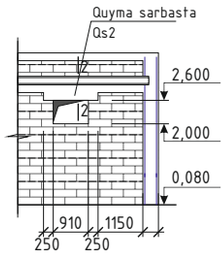
Devorni mustahkamlash elementlari xarajatlar jadvali

belgi	belgilash	nomi	soni dona	og'irligi kg	eslatma
Rm1	AQ- varaq	Rama Rm1	2		dona
Rm2	AQ- varaq	Rama Rm2	2		dona
Qr1	AQ- varaq	Quyma rigel Qr1	24,0	18,3kg	m
Qs1	AQ- varaq	Quyma sarbasta Qs1	2		dona
Qs2	AQ- varaq	Quyma sarbasta Qs2	1		dona
S1	1.038.1-1вып.1	Tayyor sarbasta S1 2ПБ16-2	5		m
Gs1	Сер 2.130-6с. В1	Gorizontal setka Gs1			m
	(1 metr uchun xarajat)	Quyma rigel Qr1			18,3kg
1	GOST 5781-82*	Φ25 AIII L=1000	4	3,85	15,4kg
2	GOST 5781-82*	Φ8 AI L=1480	5	0,58	2,9kg
	(1 dona uchun xarajat)	Quyma sarbasta Qs1			
Tk1	AQ- varaq	To'g'ri karkas Tk1	3	7,42kg	dona
3	GOST 5781-82*	Φ6 AI L=370	22	0,082	dona
		Beton sinfi V15	0,32		m^3
	(1 dona uchun xarajat)	Quyma sarbasta Qs2			
Tk2	AQ- varaq	To'g'ri karkas Tk2	3	5,99kg	dona
3	GOST 5781-82*	Φ6 AI L=370	18	0,082	dona
		Beton sinfi V15	0,265		m^3

Quyma sarbasta Qs1



Quyma sarbasta Qs2



1. Rama Rm1 chizmasi va xarajatlar jadvali AQ- varaqqa qarang.
2. Rama Rm2 chizmasi va xarajatlar jadvali AQ- varaqqa qarang.
3. Pardadevorlarni kuchaytirish tugunlari (1,2,3) AQ- varag'qa qarang.

	(1 dona uchun xarajat)	To'g'ri karkas Tk1			5,99kg
4	GOST 5781-82*	Φ14 AIII L=2160	2	2,61	5,22kg
5	GOST 5781-82*	Φ6 AI L=320	11	0,07	0,77kg
	(1 dona uchun xarajat)	To'g'ri karkas Tk2			3,79kg
6	GOST 5781-82*	Φ14 AIII L=1360	2	1,65	3,3kg
5	GOST 5781-82*	Φ6 AI L=320	7	0,07	0,49kg

o'zg.	soni	varaq	xuj.№	imzo	sana		
LBM		To'raboyev Sh				Shifr: AQ-	
bajardi		Isomiddinov A.				Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish	
						17 o'rinli xojatxona va o'tish yo'lagi	bosqich: IL; varaq: 6; varaqlar: 17
						Devorni mustahkamlash elementlarini joylashtirish rejasi. Xarajatlar jadvali	"Norma qurilish konsalting" MChJ

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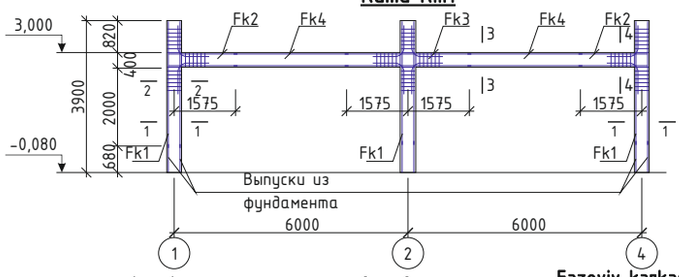
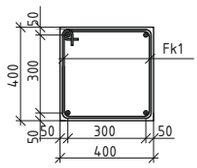
Rama Rm1 elementlarining xarajatlar jadvali

belgi	belgilash	nomi	soni	og'irligi kg	eslatma
	(1 dona uchun xarajat)	Rama Rm1			
		Ustun			
Fk1	Ushbu varaq	Fazoviy karkas Fk1	3	62,46	187,38kg
		B25 sinfli beton	1,87		m^3
		Rigel			
Fk2	Ushbu varaq	Fazoviy karkas Fk2	2	50,26	100,52kg
Fk3	Ushbu varaq	Fazoviy karkas Fk3	1	93,54	93,54kg
Fk4	Ushbu varaq	Fazoviy karkas Fk4	2	80,12	160,24kg
OC1	GOST 5781-82*	Φ22 AIII L=1600	16	4,41	70,56kg
X1	GOST 5781-82*	Qisqich Φ8 AI L=1480	21	0,58	12,18kg
		B25 sinfli beton	1,8		m^3
	(1 dona uchun xarajat)	Fazoviy karkas Fk1			62,46kg
1	GOST 5781-82*	Φ25 AIII L=3200	4	12,32	49,28kg
2	GOST 5781-82*	Φ8 AI L=1480	21	0,58	12,18kg
OC2	GOST 10704-63*	Труба Φ28x2,5 L=160	4	0,25	1,0kg
	(1 dona uchun xarajat)	Fazoviy karkas Fk2			50,26kg
3	GOST 5781-82*	Φ25 AIII L=1730	4	6,56	26,24kg
4	GOST 5781-82*	Φ28 AIII L=1730	2	8,36	16,72kg
2	GOST 5781-82*	Φ8 AI L=1480	10	0,58	5,8kg
OC2	GOST 10704-63*	Труба Φ28x2,5 L=160	6	0,25	1,5kg
	(1dona uchun xarajat)	Fazoviy karkas Fk3			90,54kg
5	GOST 5781-82*	Φ25 AIII L=3150	4	12,13	48,52kg
6	GOST 5781-82*	Φ28 AIII L=3150	2	15,21	30,42kg
2	GOST 5781-82*	Φ8 AI L=1480	20	0,58	11,6kg
OC2	GOST 10704-63*	Труба Φ28x2,5 L=160	12	0,25	3,0kg
	(1dona uchun xarajat)	Fazoviy karkas Fk4			80,12kg
7	GOST 5781-82*	Φ25 AIII L=2850	4	10,97	43,88kg
8	GOST 5781-82*	Φ28 AIII L=2850	2	13,77	27,54kg
2	GOST 5781-82*	Φ8 AI L=1480	15	0,58	8,7kg

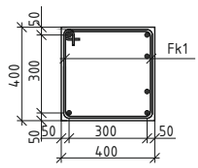
Rama Rm1



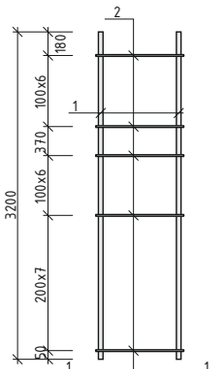
1 - 1



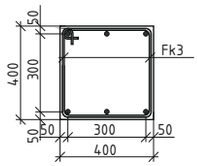
2 - 2



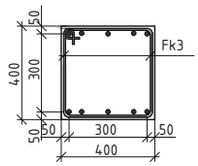
Fazoviy karkas Fk1

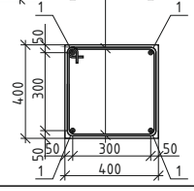


3 - 3



4 - 4





1. Ramkalar RST.Uz 865-98 ga muvofiq E50A tipidagi elektrodlar bilan payvandlanishi kerak.
2. Ramkalarni mustahkamlash GOST 5781-82* ga muvofiq ishlab chiqariladi.
3. Barcha payvandlangan choklar payvandlangan elementlarning eng kichik qalinligida qabul qilinadi, lekin h =8mm dan kam bo'lmasligi kerak.
4. Ushbu varaq AQ- varaqlari bilan birgalikda o'qiladi.

o'zg.	soni	varaq	xuj.№	imzo	sana		
LBM		To'raboyev Sh				Shifr: AQ-	
bajardi		Isomiddinov A.				Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish	
						17 o'rinli xojatxona va o'tish yo'lagi	bosqich: IL; varaq: 7; varaqlar: 17
						Rama Rm1. Xarajatlar jadvali 1-1, 2-2, 3-3, 4-4	"Norma qurilish konsalting" MChJ

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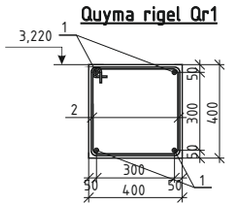
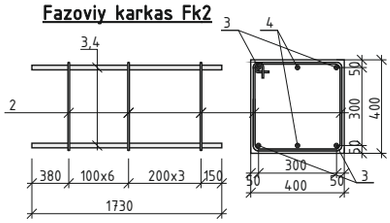
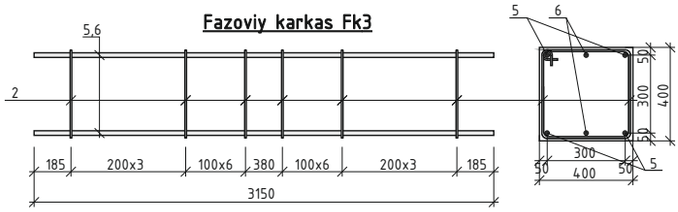
Quyma rigel Qr1

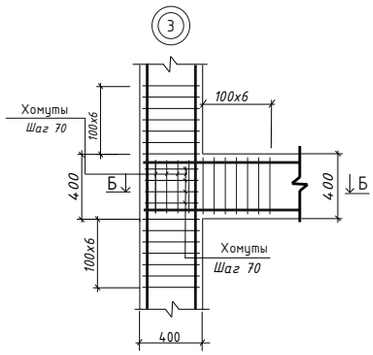


Fazoviy karkas Fk2

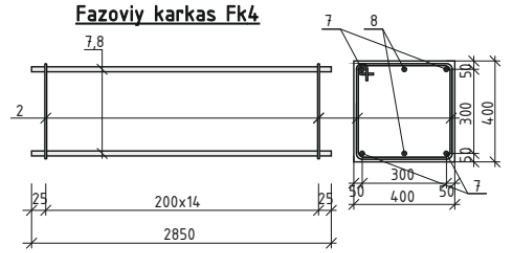


Fazoviy karkas Fk3





Fazoviy karkas Fk4



To'g'ri karkas Tk1, Tk2

o'zg.	soni	varaq	xuj.№	imzo	sana	Shifr: AQ-		
						Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish		
LBM		To'raboyev Sh.				17 o'rinli xojatxona va o'tish yo'lagi	bosqich: IL	varaq: 8 / varaqlar: 17
bajardi		Isomiddinov A.				Quyma rigel Qr1. Fazoviy karkaslar Fk1,2,3. To'g'ri karkaslar Tk1,2.	"Norma qurilish konsalting" MChJ	

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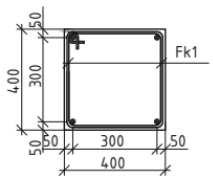
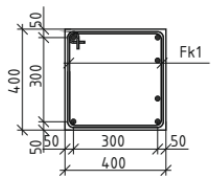
Rama Rm2 elementlarining xarajatlar jadvali

belgi	belgilash	nomi	soni	og'irligi kg	eslatma
	(1 dona uchun xarajat)	Rama Rm1			
		Ustun			
Fk1	Ushbu varaq	Fazoviy karkas Fk1	2	62,46	124,92kg
		B25 sinfli beton	1,25		m^3
		Rigel			
Fk2	Ushbu varaq	Fazoviy karkas Fk2	1	113,14	113,14kg
OC1	GOST 5781-82*	Ф22 AIII L=1600	8	4,41	35,28kg
X1	GOST 5781-82*	Qisqich Ф8 AI L=1480	24	0,58	13,92kg
		B25 sinfli beton	0,52		m^3
	(1 dona uchun xarajat)	Fazoviy karkas Fk1			62,46kg
1	GOST 5781-82*	Ф25 AIII L=3200	4	12,32	49,28kg
2	GOST 5781-82*	Ф8 AI L=1480	21	0,58	12,18kg
OC2	GOST 10704-63*	Труба Ф28x2,5 L=160	4	0,25	1,0kg
	(1 dona uchun xarajat)	Fazoviy karkas Fk2			113,14kg
3	GOST 5781-82*	Ф25 AIII L=3960	4	15,25	60,96kg
4	GOST 5781-82*	Ф28 AIII L=3960	2	19,13	38,26kg
2	GOST 5781-82*	Ф8 AI L=1480	24	0,58	13,92kg

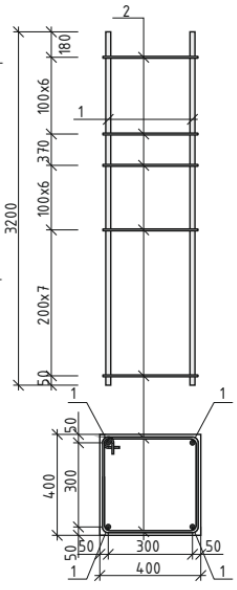
1 – 1



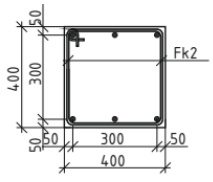
2 – 2



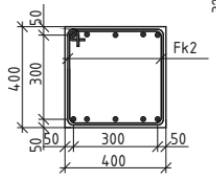
Fazoviy karkas Fk1



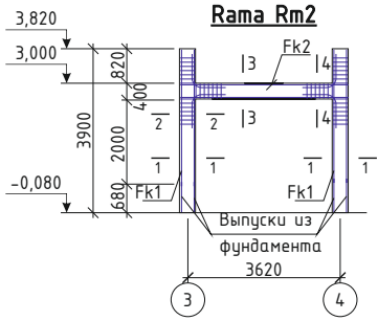
3 – 3



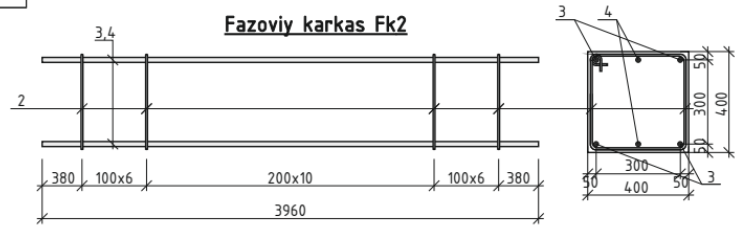
4 – 4



Rama Rm2



Fazoviy karkas Fk2



o'zg.	soni	varaq	xuj.№	imzo	sana	Shifr: AQ-		
						Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish		
LBM		To'raboyev Sh.				17 o'rinli xojatxona va o'tish yo'lagi	bosqich: IL	varaq: 9 / varaqlar: 17
bajardi		Isomiddinov A.				Rama Rm2. Xarajatlar jadvali 1-1, 2-2, 3-3, 4-4	"Norma qurilish konsalting" MChJ	

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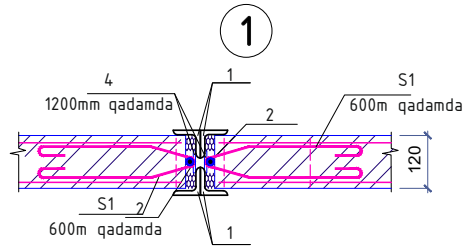
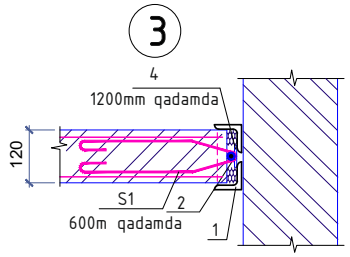
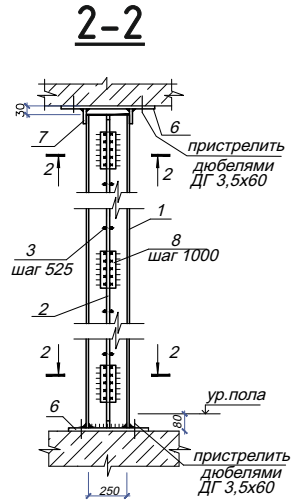
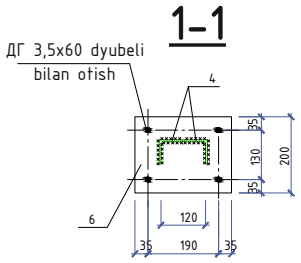
Pardadevorni kuchaytirish elementlarining xarajatlar jadvali

belgi	belgilash	nomi	soni	og'irligi, 1dona, kg	eslatma
1		1-tugun	1	26,12kg	dona
2		2-tugun	2	37,72kg	dona
3		3-tugun	3	26,12kg	dona
	(1 dona uchun xarajat)	1-tugun			52,24kg
1	GOST8509-93	L40x4 L=3000	4	7,26kg	29,04kg
2	GOST5781-82*	Ф12AIII L=3000	2	2,66kg	5,32kg
3	GOST5781-82*	Ф6AI L=850	12	0,19kg	2,28kg
4	GOST19903-74	-4x130x260	8	1,06kg	8,48kg
5	GOST19903-74	-4x260x200	4	1,63kg	6,52kg
6	GOST19903-74	-4x50x150	4	0,15kg	0,6kg
	(1 dona uchun xarajat)	2-tugun			37,72kg
1	GOST8509-93	L40x4 L=3000	2	7,26kg	14,52kg
2	GOST5781-82*	Ф12AIII L=3000	2	2,66kg	5,32kg
3	GOST5781-82*	Ф6AI L=850	12	0,19kg	2,28kg
4	GOST19903-74	-4x130x260	8	1,06kg	8,48kg
5	GOST19903-74	-4x260x200	4	1,63kg	6,52kg
6	GOST19903-74	-4x50x150	4	0,15kg	0,6kg
	(1 dona uchun xarajat)	3-tugun			26,12kg
1	GOST8509-93	L40x4 L=3000	2	7,26kg	14,52kg
2	GOST5781-82*	Ф12AIII L=3000	1	2,66kg	2,66kg
3	GOST5781-82*	Ф6AI L=850	6	0,19kg	2,66kg
4	GOST19903-74	-4x130x260	4	1,06kg	4,24kg
5	GOST19903-74	-4x260x200	2	1,63kg	3,26kg
6	GOST19903-74	-4x50x150	2	0,15kg	0,3kg

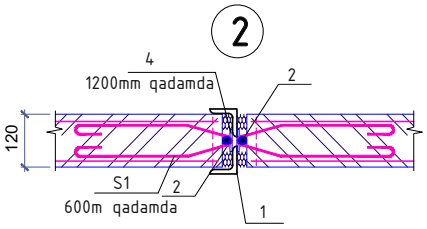








Metall elementlarning ulanishi RSTUz865-98 bo'yicha E42 tipidagi elektrodlar bilan payvandlash orqali amalga oshiriladi. Payvandlanadigan choklarning balandligi elementlarning qalinligidan kam bo'lmasligi kerak.
Birlashtiruvchi metall qismlar va konstruktsiyalar PF-020 GOST 18.186-79 gruntovka va PF-115 markali emal bo'yoqlari bilan 2 marta bo'yang.



o'zg.	soni	varaq	xuj.№	imzo	sana
LBM		To'raboyev Sh			
bajardi		Isomiddinov A.			

Shifr: AQ-

Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish

17 o'rinli xojatxona va o'tish yo'lagi

bosqich	varaq	varaqlar
IL	10	17

Pardadevorni kuchaytirish elementlarining xarajatlar jadvali 1,2,3 tugunlar. 1-1, 2-2 kesimlar

"Norma qurilish konsalting" MChJ

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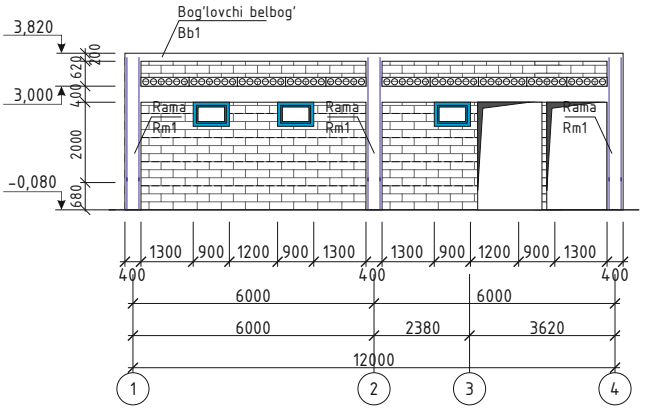
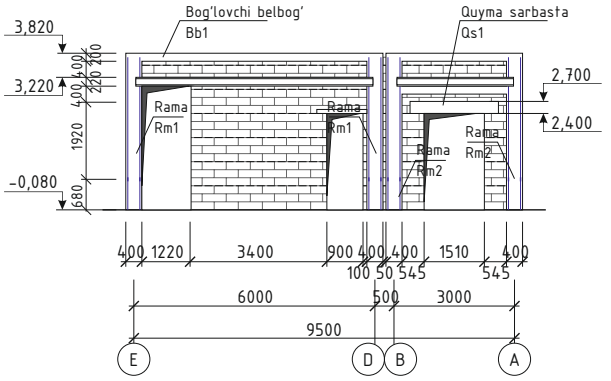
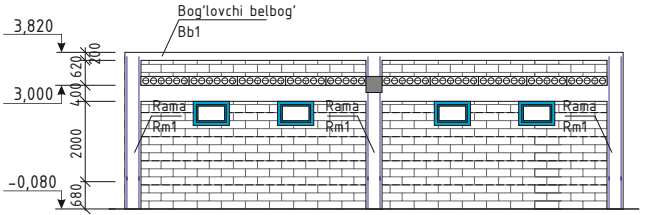
D-o'qda 1-4 o'qlar orasidagi devorlar yoyilmasi



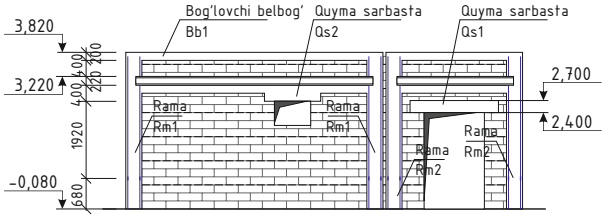
3-o'qda E-A o'qlar orasidagi devorlar yoyilmasi

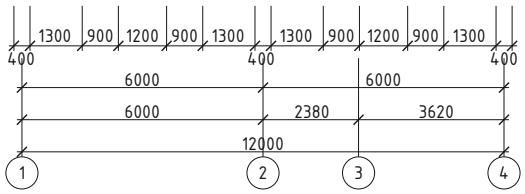


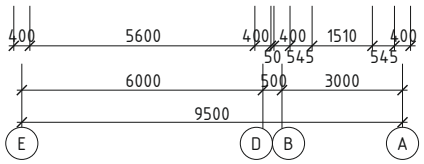
E-o'qda 1-4 o'qlar orasidagi devorlar yoyilmasi



4-o'qda E-A o'qlar orasidagi devorlar yoyilmasi







o'zg.	soni	varaq	xuj.№	imzo	sana	Shifr: AQ-			
						Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish			
LBM		To'raboyev Sh				17 o'rinli xojatxona va o'tish yo'lagi	bosqich	varaq	varaqlar
							IL	11	17
bajardi		Isomiddinov A.				D,E o'qlarda 1-4 o'qlar orasida devor yoyilmasi. 3,4 o'qlarda E-A o'qlar orasida devor yoyilmasi.	"Norma qurilish konsalting" MChJ		

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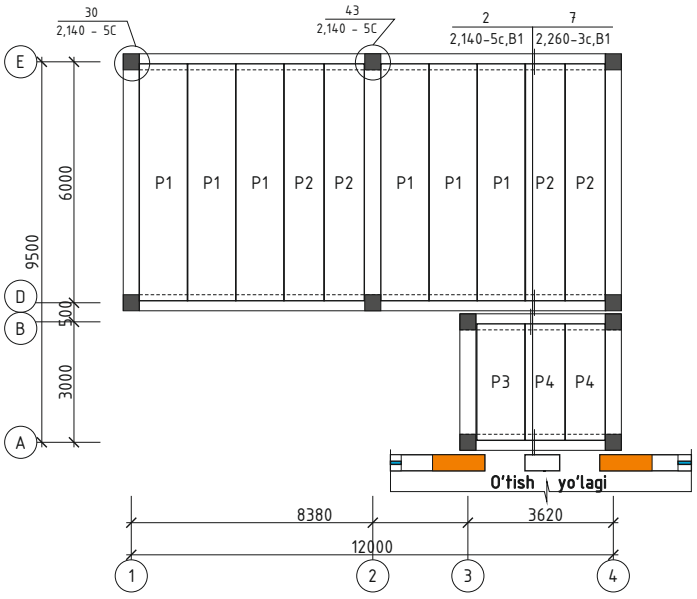
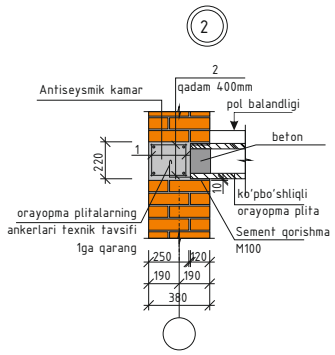
3,220 metr balandlikdagi tomyopma rejasi



Tomyopma elementlarining xarajat jadvali

markasi	Belgilash	Nomi	soni	og'irligi kg	Eslatma
P1	УТР 46,2-95,В1,	1ПК 59.12-8АIII-С9	6		dona
P2	УТР 46,2-95,В1,	1ПК 59.10-8АIII-С9	4		dona
P3	1.141.1-29с в.3	1ПК 29.12-8А-III С-9	1		dona
P4	1.141.1-29с в.3	1ПК 29.10-8А-III С-9	2		dona
		Antiseysmik kamar			
2	Серия 2.140-5с	Tugun 2	31,24		m
7	Серия 2.260-3с	Tugun 7	31,24		m
30	Серия 2.140-5с	Tugun 30	8		dona
43	Серия 2.140-5с	Tugun 43	2		dona



1. Ushbu varaq AQ- varaq bilan birgalikda o'qilishi kerak.
2. Tugunlar 2.140-5s V1, 2.260-3s seriyasiga muvofiq amalga oshiriladi.
4. Tomyopma rejasidagi teshiklar 150mm dan kichikroq. Har joyida bo'shliqlar bo'ylab, plitalarning qo'llab-quvvatlovchi qovurg'alarining yaxlitligini saqlab, keyin ohak bilan ko'miladi.

o'zg.	soni	varaq	xuj.№	imzo	sana	Shifr: AQ-			
						Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish			
LBM		To'raboyev Sh				17 o'rinli xojatxona va o'tish yo'lagi	bosqich	varaq	varaqlar
							IL	12	17
bajardi		Isomiddinov A.				3,220m balandlikda tomyopma rejasi. Tomyopma xarajat jadvali	"Norma qurilish konsalting" MChJ		

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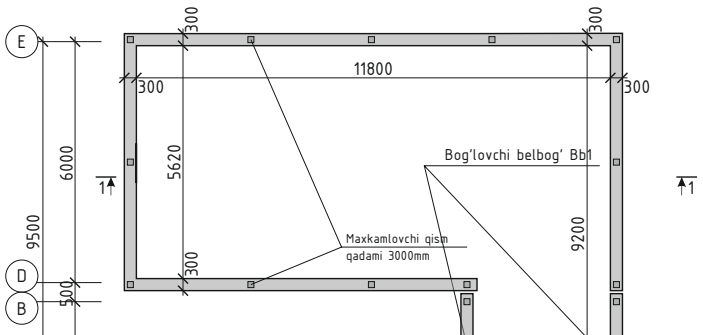
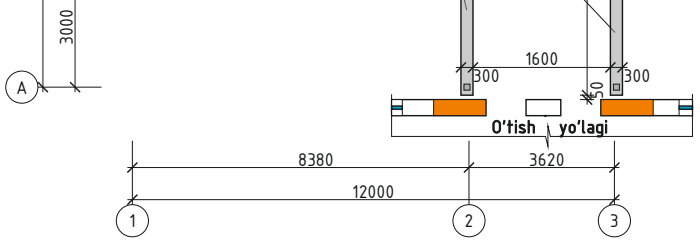
Parapetni mustahkamlash elementlarini joylashtirish rejasi

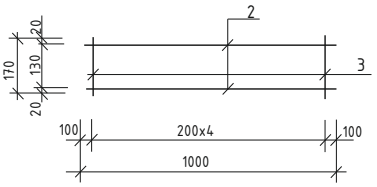


Parapetni mustahkamlash elementlarini joylashtirish rejasi tavsifi

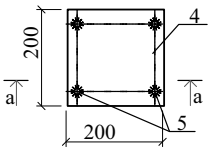
belgi	belgilash	nomi	soni	og'irligi kg	eslatma
Bb1	ushbu varaq	Bog'lovchi belbog' Bb1	39,4		m
Mq1	ushbu varaq	Mahkamlovchi qism Mq1	16		dona
	(1metr uchun xarajat)	Bog'lovchi belbog' Bb1			
Tk1	ushbu varaq	To'g'ri karkas Tk1	2	2,61	5,22kg
1	GOST 5781-82*	Φ6 AI L=370	10	0,082	0,82kg
		B15 sinfli beton	0,06		m^3
	(1metr uchun xarajat)	To'g'ri karkas Tk1			2,61kg
2	GOST 5781-82*	Φ14 AIII L=1000	2	1,21	2,42kg
3	GOST 5781-82*	Φ6 AI L=170	5	0,038	0,19kg
	(1dona uchun xarajat)	Mahkamlovchi qism Mq1			1,96kg
2	GOST 19904-90	t4x200 L=200	1	1,25	1,25kg
3	GOST 5781-82*	Φ12 AIII L=200	4	0,177	0,71kg



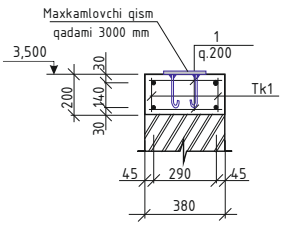
To'g'ri karkas Tk1

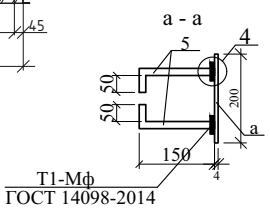


Maxkamlovchi qism Mq1



Bog'lovchi belbog' Bb1





1. Tom rejasi AQ- varag'iga qarang.
2. Ichki pardozlash ishlari jadvali AQ- varaqqa qarang.
3. Tashqi pillapoyalar chizmasi AQ- varaqqa qarang.
4. Metall soyabon AQ- varaqqa qarang.
5. Deraza, eshik, vitrajlar chizmalari AQ- varaqqa qarang.
6. Bu varaqni AQ- , AQ- , TX- , OV- , VK- , EO- , SSPS- varaqlari bilan birgalikda o'qing.

o'zg.	soni	varaq	xuj.№	imzo	sana	Shifr: AQ-		
						Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish		
LBM		To'raboyev Sh.				17 o'rinli xojatxona va o'tish yo'lagi	bosqich IL	varaq 13 / varaqlar 17
bajardi		Isomiddinov A.				Parapetni mustahkamlash elementlarini joylashtirirsh rejasi. Xarajatlar jadvali.	"Norma qurilish konsalting" MChJ	

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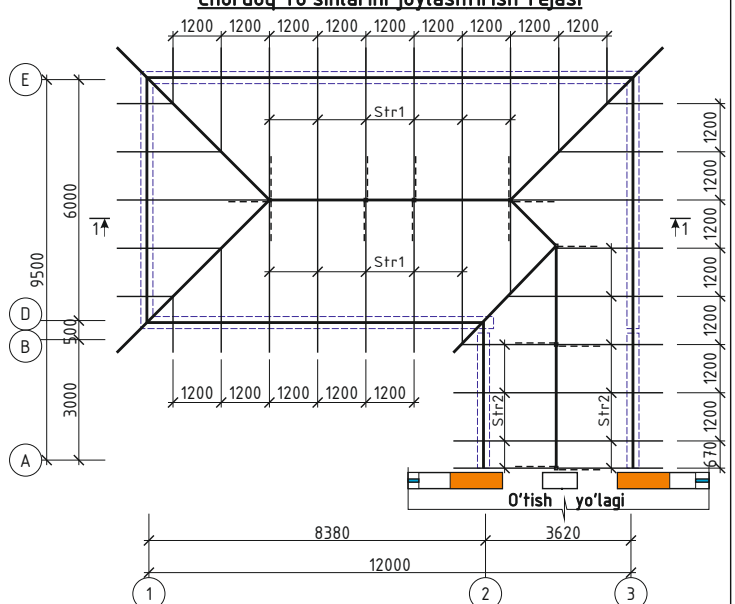
Chordoq to'sinlarini joylashtirish rejasi xarajatlar jadvali

belgi	belgilash	nomi	soni	vazni kg	eslatma
		Ustun U1	4	13,89kg	dona
1	GOST30245-2003	▢ 80x80x4 L=1270	1	11,71	dona
2	GOST19903-74	- 4x100 L=100	1	0,3	dona
3	GOST19903-74	- 6x200 L=200	1	1,88	dona
		Anker bolt M10x100	4	0,06	dona
		Ustun U2	3	10,94kg	dona
4	GOST30245-2003	▢ 80x80x4 L=950	1	8,76	dona
2	GOST19903-74	- 4x100 L=100	1	0,3	dona
3	GOST19903-74	- 6x200 L=200	1	1,88	dona
		Anker bolt M10x100	4	0,06	dona
		Stropila Str1	13	34,13kg	dona
5	GOST30245-2003	▯ 80x60x4 L=3830	1	30,53	dona
6	GOST19903-74	- 4x50 L=210	1	3,3	dona
7	GOST8509-86	∟ 50x5 L=80	1	0,3	dona
		Stropila Str2	10	25,2kg	dona
8	GOST30245-2003	▯ 80x60x4 L=2710	1	21,6	dona
6	GOST19903-74	- 4x50 L=210	1	3,3	dona
7	GOST8509-86	∟ 50x5 L=80	1	0,3	dona
		Narojnik N1		249,0kg	
9	GOST30245-2003	▯ 80x60x4 L=umumiy	30,64	7,97	m
7	GOST8509-86	∟ 50x5 L=80	16	0,3	dona
		Raskoslar			
R1	GOST30245-2003	▢ 60x60x2 L=1500	10	5,34kg	dona
R2	GOST30245-2003	▢ 60x60x2 L=1240	5	4,41kg	dona
M1	GOST30245-2003	▢ Mauerlat M1 60x60x4 L=umumiy	39,4	6,71	264,37kg
P1	GOST30245-2003	▢ Progon P1 80x80x4 L=umumiy	33,2	9,22	306,1kg
		Obreshetka Ob1		975,6kg	
Ob1	GOST8645-68	▭ 40x30x2 L=umumiy	347,2	2,81	kg

Metall elementlarning ulanishi RSTUz865-98 bo'yicha E42 tipidagi elektrodlar bilan payvandlash orqali amalga oshiriladi. Payvandlanadigan choklarning balandligi elementlarning qalinligidan kam bo'lmasligi kerak.
Birlashtiruvchi metall qismlar va konstruktsiyalar PF-020 GOST 18.186-79 gruntovka va PF-115 markali emal bo'yoqlari bilan 2 marta bo'yang.

Chordoq to'sinlarini joylashtirish rejasi



		Shamollatish darchasi ShD1	2	54,0kg	108,0kg
10	GOST30245-2003	▯ 60x60x3 L=1320	2	6,85	dona
11	GOST30245-2003	▯ 60x40x2 L=umumiy	8,0	2,93	dona
12	GOST8645-68	▭ 40x30x2 L=umumiy	6,0	2,02	kg
13	GOST24454-80E	Yog'och qoplama 10x70 L=umumiy	2,85	0,002	m
		Polimer qoplamali profnastil 0,51mm	1,5		m2
		Оцинкованный конёк	33,2		m
		Qor ushlagich	40,8		m

o'zg.	soni	varaq	xuj.№	imzo	sana	Shifr: AQ-		
						Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish		
LBM		To'raboyev Sh.				17 o'rinli xojatxona va o'tish yo'lagi	bosqich IL	varaq 14 / varaqlar 17
bajardi		Isomiddinov A.				Chordoq to'sinlarini joylashtirish rejasi. Chordoq to'sinlarini joylashtirish rejasi xarajatlar jadvali.	"Norma qurilish konsalting" MChJ	

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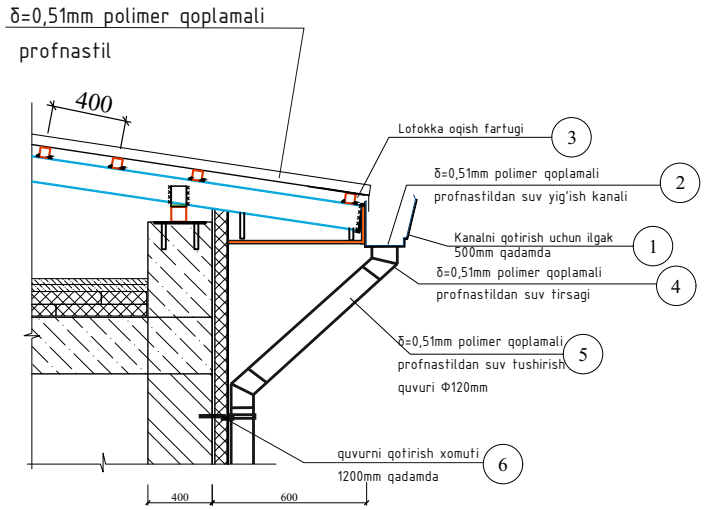
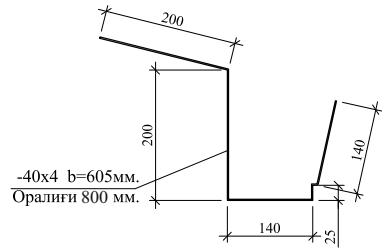
Tugun "1"

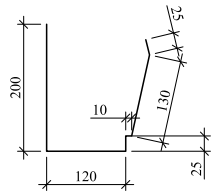


Элементы по кровлям

Поз. 1 Лотокни қотириш илгаги

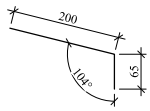


Поз. 2 Галванизли пўлатдан сув лотоги b=510мм. (66,8 метр)



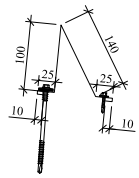
Икки томонлама полимер қопламали металл туника қалинлиги 0,7мм. (Элементнинг бир-бирига кийғизилиши 50мм.)

Поз. 3 Сув қочириш қопламаси b=265мм.



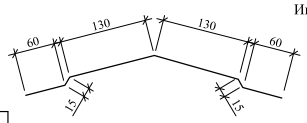
Икки томонлама полимер қопламали металл туника қалинлиги 0,7мм. (Элементнинг бир-бирига кийғизилиши 50мм.)

Поз. 8 Қор ушлагичи b=310мм.



Икки томонлама полимер қопламали металл туника қалинлиги 0,6мм. Детал узунлиги 3.0 м

№7 tom cho'qqisi qoplamasi



δ=0,51mm polimer qoplamali profnastildan tom cho'qqisi qoplamasi (elementlarning bir-biriga kiygizilishi 50mm)

Suv yig'ish kanali elementlari uchun xarajatlar jadvali

№	nomi	Nomlanishi	soni	hajmi birlikda	izoh
1	ishlab chiqaruvchi	lotokni qotirish ilgagi	132		dona
2	ishlab chiqaruvchi	Suv qochirish qoplamasi qalinligi-0.6mm eni-265mm	33,05		m
3	ishlab chiqaruvchi	δ=0,51mm polimer qoplamali profnastildan suv tirsagi	18		dona
4	ishlab chiqaruvchi	quvurni qotirish xomuti	24		dona
5	ishlab chiqaruvchi	δ=0,51mm polimer qoplamali profnastildan tom cho'qqisi qoplamasi	26,64		m

o'zg.	soni	varaq	xuj.№	imzo	sana
LBM		To'raboyev Sh			
bajardi		Isomiddinov A.			

Shifr: AQ-

Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish

17 o'rinli xojatxona va o'tish yo'lagi

bosqich	varaq	varaqlar
IL	15	17

Tugun 1. Suv yig'ish kanali elementlari xarajatlar jadvali

"Norma qurilish konsalting" MChJ

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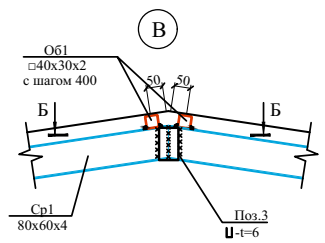
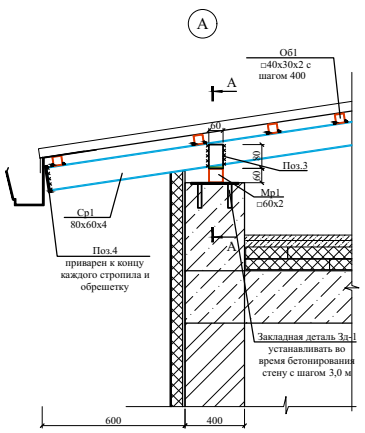
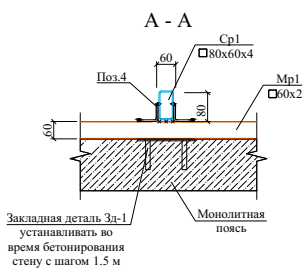
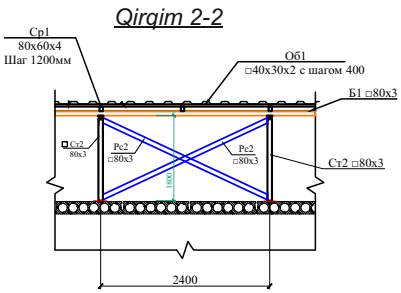
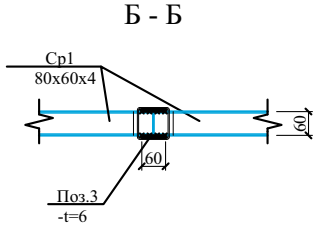
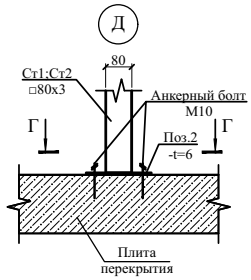


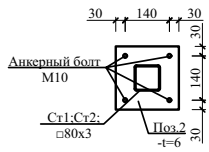












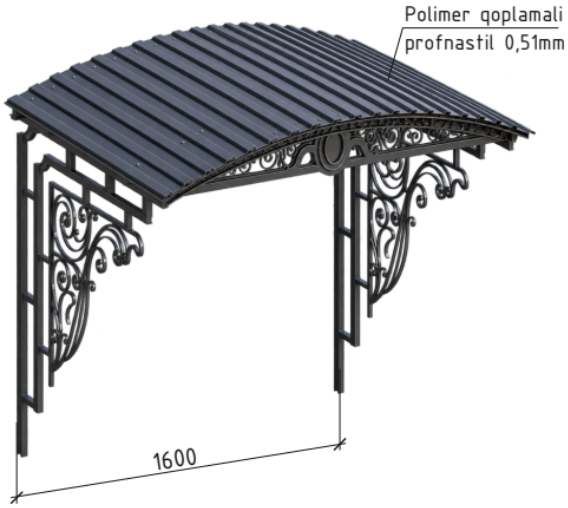
Взам.инв.N

Metall elementlarning ulanishi RSTUz865-98 bo'yicha E42 tipidagi elektrodlar bilan payvandlash orqali amalga oshiriladi. Payvandlanadigan choklarning balandligi elementlarning qalinligidan kam bo'lmasligi kerak.
Birlashtiruvchi metall qismlar va konstruktsiyalar PF-020 GOST 18.186-79 gruntovka va PF-115 markali emal bo'yoqlari bilan 2 marta bo'yang.

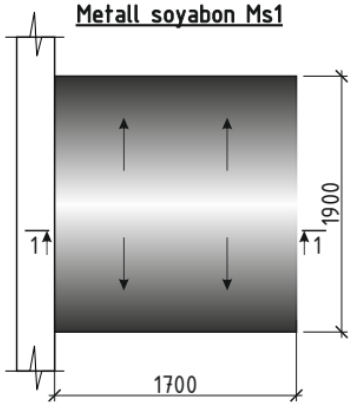
o'zg.	soni	varaq	xuj.№	imzo	sana	Shifr: AQ-
LBM		To'raboyev Sh				Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish
bajardi		Isomiddinov A.				17 o'rinli xojatxona va o'tish yo'lagi — bosqich: IL; varaq: 16; varaqlar: 17
						A,B,V tugunlar. A-A, B-B, G-G kesimlar — "Norma qurilish konsalting" MChJ

Подпись,дата

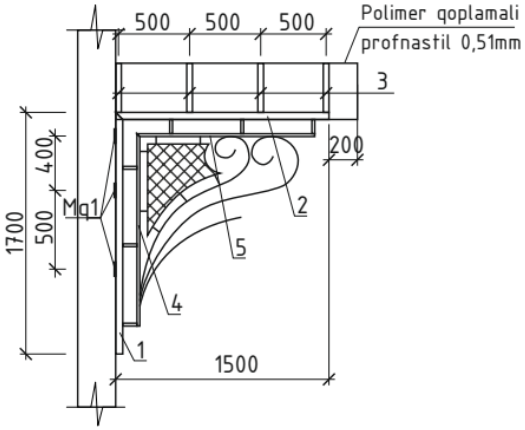
Инв.Nподл.



Metall soyabon Ms1



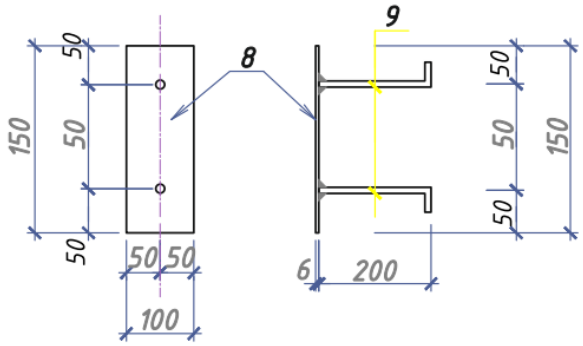
1-1 qirqim



Metal soyabon Ms1 xarajatlar jadvali

belgi	belgilash	nomi	soni	vazni kg	eslatma
		Metall soyabon Ms1	2	54,85	109,7
	(1dona uchun sarf)	Metall soyabon Ms1		54,85	
1	GOST30245-2003	▢ 50x50x2 L=1700	2	4,98	9,96
2	GOST30245-2003	▢ 50x50x2 L=1500	2	4,4	8,8
3	GOST32931-2015	▢ 20x20x2 L=1800	4	1,94	7,76
4	GOST32931-2015	▢ 20x20x2 L=1350	2	1,46	2,92
5	GOST32931-2015	▢ 20x20x2 L=1250	2	1,35	2,7
6	GOST32931-2015	▢ 20x20x2 L=100	12	0,108	1,3
7	GOST2591-2006	■ 10x10 L=umumiy	13	0,785	10,21
		Mahkamlovchi qism Mq1	6	1,6	9,6
8	GOST19903-74	-6x100 L=150	1	0,71	0,71
9	GOST5781-82*	Φ12 A-I L=250	2	0,444	0,888
		Polimer qoplamali profnastil 0,51mm	3,23		m^2

Maxkamlovchi qism MQ1.



				shifr: MQ
LBM	To'raboyev Sh			Andijon viloyati Asaka tumani Qo'ng'irot MFYda joylashgan 37-sonli umumta'lim maktabini rekonstruksiya qilish
bajardi	Isomiddinov A.			17 o'rinli xojatxona va o'tish yo'lagi — Bosqich: I.L; Sahifa: 17; Sahifadan: 17
				Metall soyabon Ms1. Xarajatlar jadvali. 1-1 — "Norma qurilish konsalting" MChJ