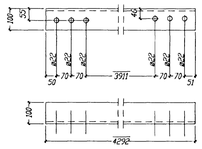
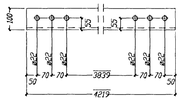
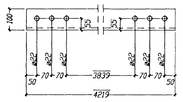


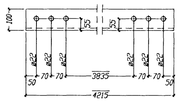
1 x Pos. 440
L100×10 ..4292



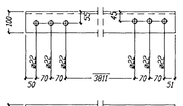
1 x Pos. 441
L100×10 ..4219



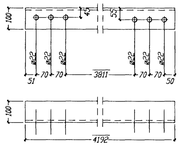
1 x Pos. 442
L100×10 ..4219



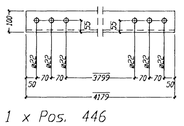
2 x Pos. 443
L100×10 ..4215



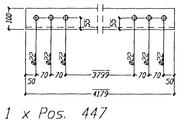
1 x Pos. 444
L100×10 ..4192



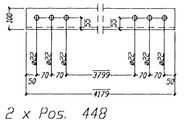
1 x Pos. 445
L100×10 ..4192



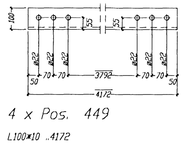
1 x Pos. 446
L100×10 ..4179



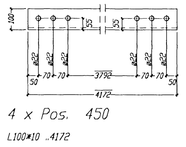
1 x Pos. 447
L100×10 ..4179



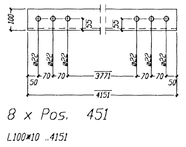
2 x Pos. 448
L100×10 ..4179



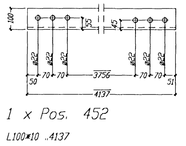
4 x Pos. 449
L100×10 ..4172



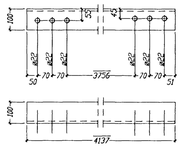
4 x Pos. 450
L100×10 ..4172



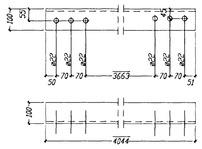
8 x Pos. 451
L100×10 ..4151



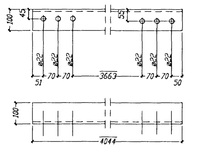
1 x Pos. 452
L100×10 ..4137



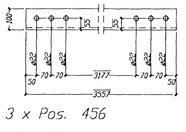
1 x Pos. 453
L100×10 ..4137



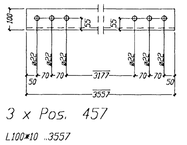
1 x Pos. 454
L100×10 ..4044



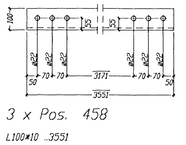
1 x Pos. 455
L100×10 ..4044



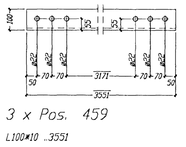
3 x Pos. 456
L100×10 ..3557



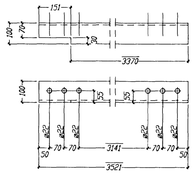
3 x Pos. 457
L100×10 ..3557



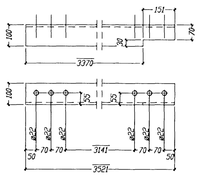
2 x Pos. 458
L100×10 ..3551



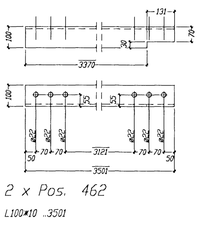
3 x Pos. 459
L100×10 ..3551



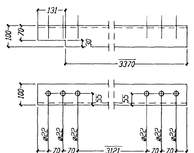
2 x Pos. 460
L100×10 ..3521



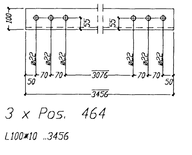
1 x Pos. 461
L100×10 ..3521



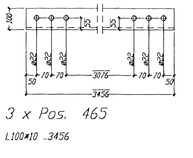
2 x Pos. 462
L100×10 ..3501



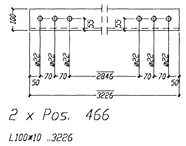
1 x Pos. 463
L100×10 ..3501



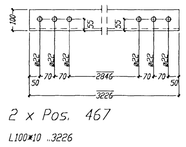
3 x Pos. 464
L100×10 ..3456



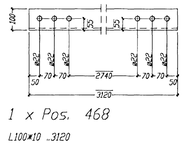
3 x Pos. 465
L100×10 ..3456



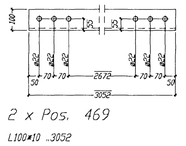
2 x Pos. 466
L100×10 ..3226



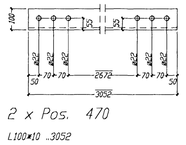
2 x Pos. 467
L100×10 ..3226



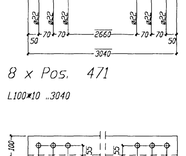
1 x Pos. 468
L100×10 ..3120



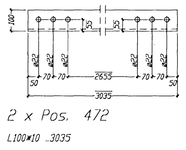
2 x Pos. 469
L100×10 ..3052



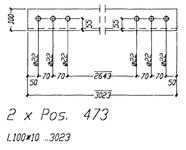
2 x Pos. 470
L100×10 ..3052



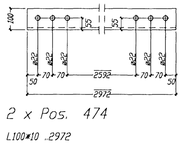
8 x Pos. 471
L100×10 ..3040



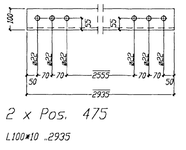
2 x Pos. 472
L100×10 ..3035



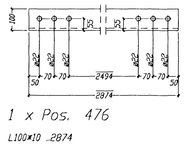
2 x Pos. 473
L100×10 ..3023



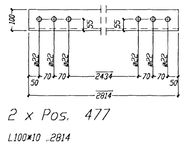
2 x Pos. 474
L100×10 ..2972



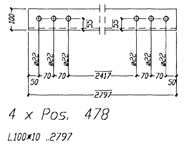
2 x Pos. 475
L100×10 ..2935



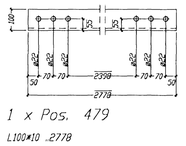
1 x Pos. 476
L100×10 ..2874



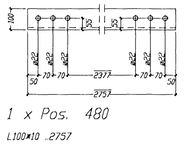
2 x Pos. 477
L100×10 ..2814



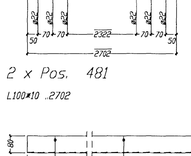
4 x Pos. 478
L100×10 ..2797



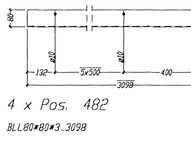
1 x Pos. 479
L100×10 ..2778



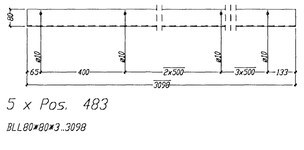
1 x Pos. 480
L100×10 ..2757



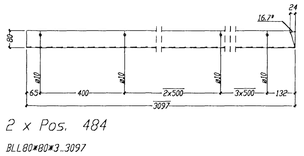
2 x Pos. 481
L100×10 ..2702



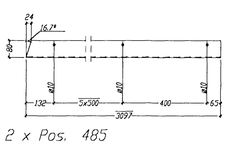
4 x Pos. 482
BLL80×80×3..3098



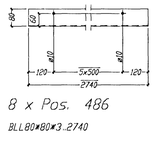
5 x Pos. 483
BLL80×80×3..3098



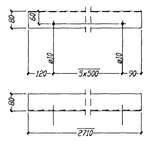
2 x Pos. 484
BLL80×80×3..3097



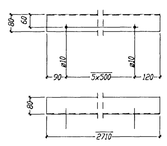
2 x Pos. 485
BLL80×80×3..3097



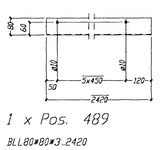
8 x Pos. 486
BLL80×80×3..2740



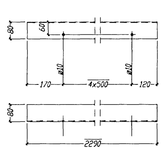
1 x Pos. 487
BLL80×80×3..2710



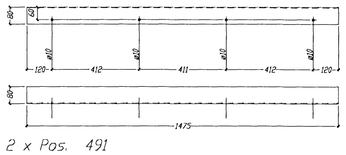
1 x Pos. 488
BLL80×80×3..2710



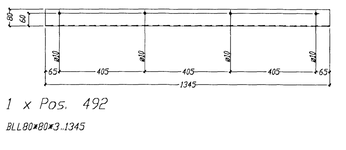
1 x Pos. 489
BLL80×80×3..2420



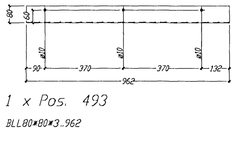
1 x Pos. 490
BLL80×80×3..2290



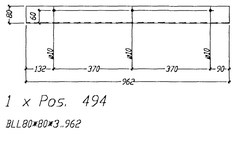
2 x Pos. 491
BLL80×80×3..1475



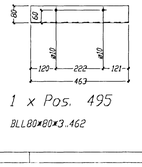
1 x Pos. 492
BLL80×80×3..1345



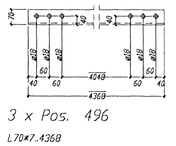
1 x Pos. 493
BLL80×80×3..962



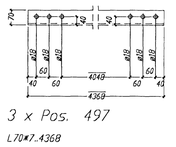
1 x Pos. 494
BLL80×80×3..962



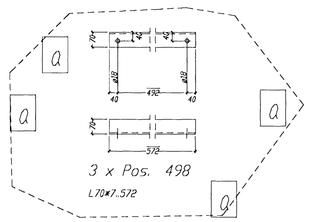
1 x Pos. 495
BLL80×80×3..462



3 x Pos. 496
L70×7..4368



3 x Pos. 497
L70×7..4368

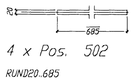


3 x Pos. 498
L70×7..572

18 x Pos. 499
RUND24..5170

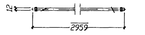
12 x Pos. 500
RUND20..5650

36 x Pos. 501
RUND20..5530

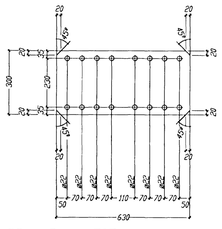


4 x Pos. 502
RUND20..685

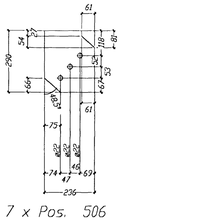
4 x Pos. 503
RUND20..430



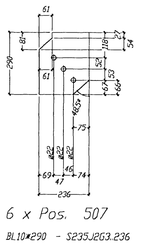
4 x Pos. 504
RUND12..2959



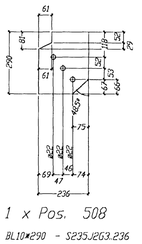
28 x Pos. 505
BL12×300 - S355J2G3.630



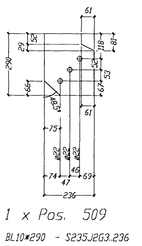
7 x Pos. 506
BL10×290 - S235J2G3.236



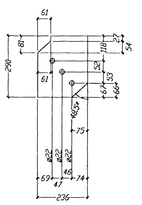
6 x Pos. 507
BL10×290 - S235J2G3.236



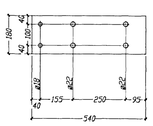
1 x Pos. 508
BL10×290 - S235J2G3.236



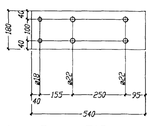
1 x Pos. 509
BL10×290 - S235J2G3.236



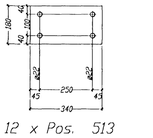
1 x Pos. 510
BL10×290 - S235J2G3.236



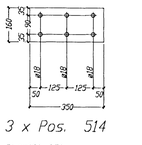
1 x Pos. 511
BL12×180 - S235J2G3.540



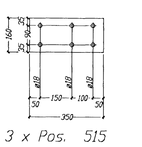
1 x Pos. 512
BL12×180 - S235J2G3.540



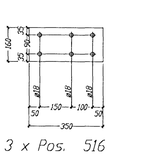
12 x Pos. 513
BL12×180 - S235J2G3.340



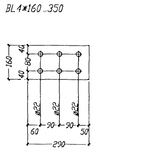
3 x Pos. 514
BL4×160..350



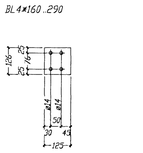
3 x Pos. 515
BL4×160..350



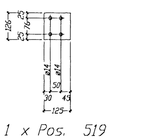
3 x Pos. 516
BL4×160..350



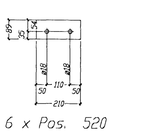
2 x Pos. 517
BL4×160..290



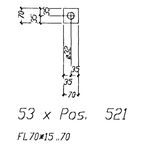
2 x Pos. 518
BL4×126..125



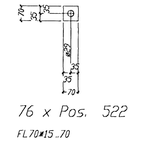
1 x Pos. 519
BL4×126..125



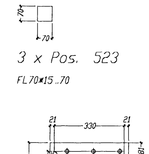
6 x Pos. 520
BL4×90..210



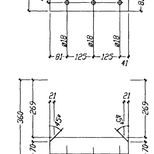
53 x Pos. 521
FL70×15..70



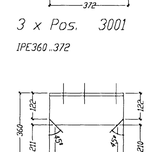
76 x Pos. 522
FL70×15..70



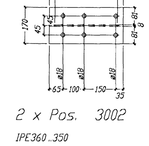
3 x Pos. 523
FL70×15..70



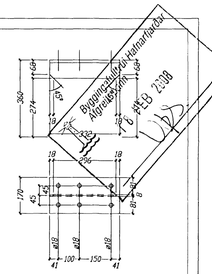
3 x Pos. 3001
IPE360..372



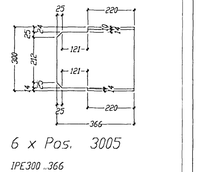
2 x Pos. 3002
IPE360..350



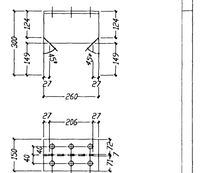
3 x Pos. 3003
IPE360..332



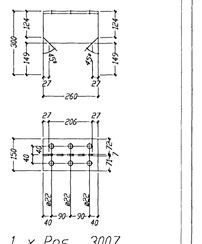
1 x Pos. 3004
IPE360..332



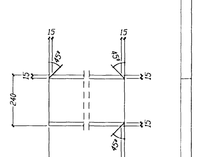
6 x Pos. 3005
IPE300..366



10 x Pos. 3006
IPE300..260



1 x Pos. 3007
IPE300..260



2 x Pos. 3008
HEB240..3702

Byggingarlóð við Hafnarfjall
Akranesskóli
6 x HEB 230B

Tolerance for welded constructions
According to DIN 8570, Pt.1+3/9+F,10.87
Welding (W P S) according to
DIN-EN 288 - 2

All unmarked welds to be fillet
continuous a=4mm thick,
not greater than 0.7 d
of the thinner element

The material for cap plates ≥20 mm thick
to be examined for laminations

Required torques,prestressing forces and forced tension angles according to DIN 18800 Pt. 7, 05.83

1	2	3	4	5	6
bolts	Required prestressing force F_v	Preloading of HV bolts (Check 028 according to DIN-EN 288 - 2)			
		HV torque technique		HV hooked technique	Grade of rotation technique
		Required torque M_A with friction value μ	Reduced torque M_A with friction value μ	Required tightening torque M_A	Grade 1 α_N °	Grade 2 α_N °	Angle of rotation α_N °	Bolt elongation Δl mm
	kN	Nm	Nm	Nm				
1 M12	59	100	70	100	40	3 | 0 | 0	60	0,15
2 M16	113	250	175	250	30	3 | 0 | 0 | 0	45	0,15
3 M20	176	490	345	490		3 | 0 | 0 | 0	45	0,19
4 M22	218	670	470	670	20	3 | 0 | 0 | 0	45	0,21
5 M24	253	850	595	850		3 | 0 | 0 | 0	45	0,25
6 M27	330	1250	875	1250	15	3 | 0 | 0 | 0	45	0,28
7 M30	403	1700	1190	1700		3 | 0 | 0 | 0	45	0,34
8 M36	588	3000	2100	3000	10	3 | 0 | 0 | 0	45	0,41

To be the great importance of the fit must be the type of thread lubricant adhere to the bolt manufacturer's recommendations
Independently on the lubricant of the threads and surfaces of bolts and nuts.
CAUTION! Hot hot galvanized HV bolts use values from column 5

Required torques,prestressing forces and forced tension angles according to DIN 18800 Pt. 7, 05.83

1	2	3	4	5	6
bolts	Required prestressing force F_v	Preloading of HV bolts (Check 028 according to DIN-EN 288 - 2)			
		HV torque technique		HV hooked technique	Grade of rotation technique
		Required torque M_A with friction value μ	Reduced torque M_A with friction value μ	Required tightening torque M_A	Grade 1 α_N °	Grade 2 α_N °	Angle of rotation α_N °	Bolt elongation Δl mm
	kN	Nm	Nm	Nm				
1 M12	59	100	70	100	40	3 | 0 | 0	60	0,15
2 M16	113	250	175	250	30	3 | 0 | 0 | 0	45	0,15
3 M20	176	490	345	490		3 | 0 | 0 | 0	45	0,19
4 M22	218	670	470	670	20	3 | 0 | 0 | 0	45	0,21
5 M24	253	850	595	850		3 | 0 | 0 | 0	45	0,25
6 M27	330	1250	875	1250	15	3 | 0 | 0 | 0	45	0,28
7 M30	403	1700	1190	1700		3 | 0 | 0 | 0	45	0,34
8 M36	588	3000	2100	3000	10	3 | 0 | 0 | 0	45	0,41

To be the great importance of the fit must be the type of thread lubricant adhere to the bolt manufacturer's recommendations
Independently on the lubricant of the threads and surfaces of bolts and nuts.
CAUTION! Hot hot galvanized HV bolts use values from column 5

Fyrir hönd Conís ehf, kt. 600105-1400 staðfestist að teikning þessi hefur verið yfirfarin. Teikningin er í samræmi við íslenska staðla og reglugerðir. 29/9'07
Nafn Kennitala 130657-4435

BIURÐ INZYNIERSKIE
Marek i Janina MUCHA
Osiny, ul. Opolska 30a, 46-070 Komprachcice tel.077-46 46 757

	DATE	NAME	SIGNATURE
designed by	28.06.2007	KMa/Ha	
drawn by			
checked by			
verified by			

NR	REVISION PAGE	DATE	NAME
INDEX	CHANGES	DATE	NAME

1:20 SCALE

Pos.440-523, 3001-3008

DESIG.
TJARNARVELLIR 11
Steel- Storage house

DRAWING NO. DRG 232 a

SHEET BL