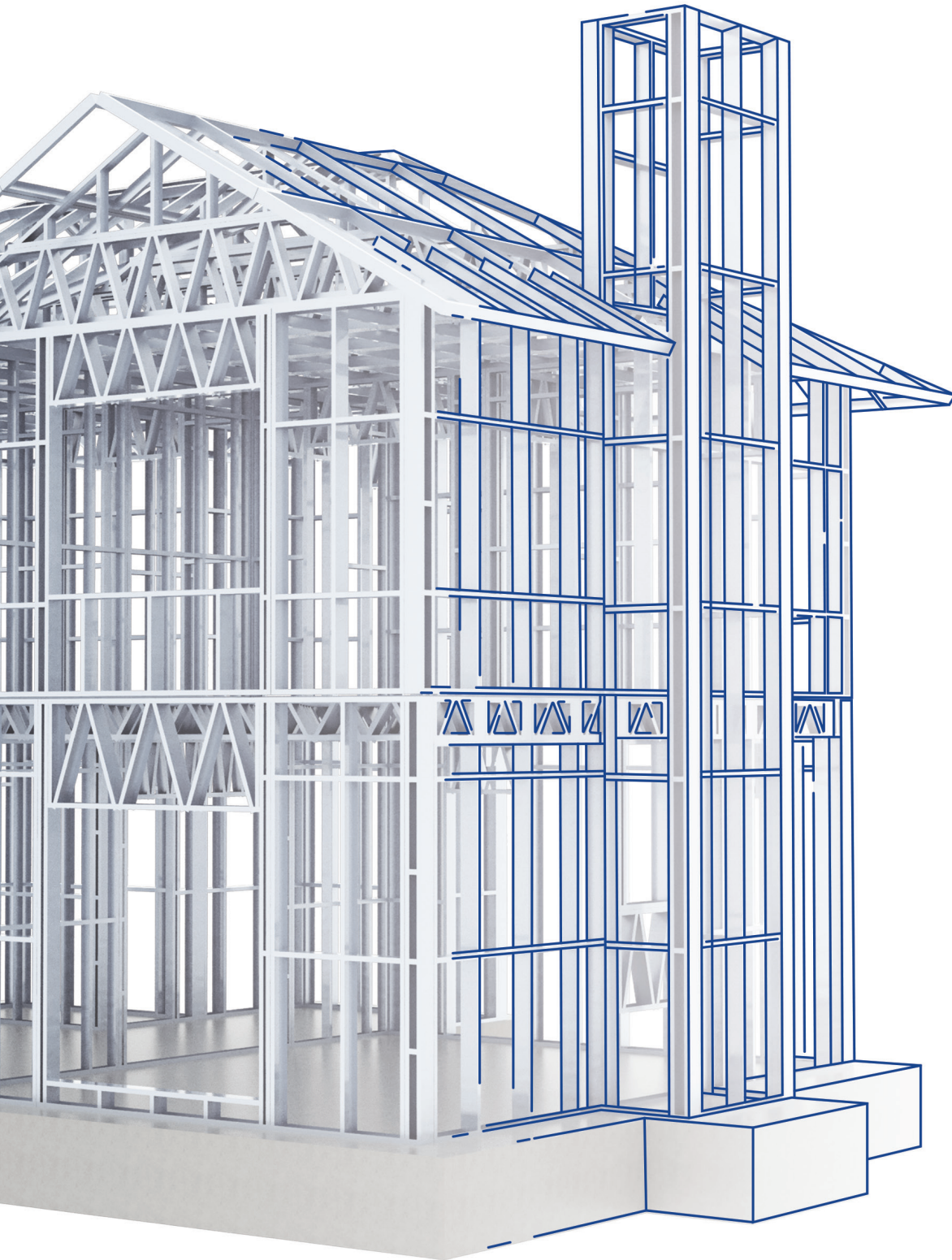




**LIGHT GAUGE
STEEL (LGS)
FRAMING**





ABOUT US

Expanding its volume in the sector with the investment decision taken in 2005, UMS established **the first and only Steel Service Center** in its region and provided fast, quality and solution-oriented services for the special size galvanized sheet requests demanded with its length cutting line, trapezoidal line and slitting line.

Starting its export adventure in 2010, it has managed to export to **more than 17 countries**, consisting of Europe, North Africa and Turkic Republics, especially Norway, Sweden, Denmark, France.

In 2018, the company took new steps in terms of quality and received **TS EN ISO 9001** Quality Management System Certificate, **TS EN ISO 14001** Environmental Management System Certificate, **TS OHSAS 18001** Occupational Health and Safety Management System Certificate, **ISO 14025** and **TS EN 15804** Environmental Product Declaration (EPD) for Steel Profile and Accessories.

UMS Uğur Metal Sanayi took its first step in the sector in **1999** by trading galvanized and painted galvanized sheet metal in Ankara Östim OIZ. In a very short time, he managed to stand out in his own sector with his principled attitude and high-quality understanding.

UMS, which crowned the importance it attaches to quality by obtaining **TS EN ISO 9001** Quality Management Certificate in 2006, has become a Steel Service Center that makes a difference with its quality certificate.

Continuing its growth and development in the sector with its investments, **the company has become the fastest producer brand in Turkey** with the largest profile production capacity and producing gypsum and gypsum board profiles, exterior profiles and connection accessories with new production lines added to its body in 2013.

2020

In 2020, **UMS Reform Suspended Ceiling Profiles** with a completely new design and surface texture with new profile lines with emboss technology were developed and added to the product portfolio.

Today, UMS, which continues its production activities /with all its speed and stability, continues to carry out its production activities with its annual **120 thousand tons of SSS production capacity, 150 million meters of profile production capacity** and modern machines, galvanized cold forming steels and galvanized non-alloy structural steels.

2019

In 2019, together with **Atılım University Material Forming and Excellence Center, UMS Power Ceiling Profiles**, which show an upper thickness performance in suspended ceiling systems compared to their counterparts, have been developed and started to be produced. The developed design has been registered by obtaining the Utility Model Certificate.

2022

In the ASO 2 region in Temelli, 38 production centers, 8000 m2 closed and 4000 m2 open, with a total area of 12000 m2, Turkey's largest and highest production capacity profile factory has been opened.

Since the first day he stepped into the sector, by adopting customer satisfaction, after-sales service, quality and reliability as principles, he continues to make a difference in the sector with the philosophy of always being **"one step ahead"** in innovation, technology and development, reaching the European markets he targets and taking firm steps forward.





UMS QUALITY POLICY

It is our fundamental principle to adopt quality as a way of life in order to provide the highest quality products and services with a view to maintain our respect and existence towards our customers.

We believe that the factors that reinforce the quality are a participatory working environment, qualified and trained personnel, healthy working conditions, environmental awareness, and ability to adapt to time and changing conditions.

***For these reasons,
it is our company
policy to:***

Increase quality and environmental awareness, maintain a safe working environment and implement innovations and modern technology by continuously training all our employees,

Provide our customers with high quality products, in the shortest time, by guaranteeing the highest quality, performance, product reliability and value in a consistent manner,

Comply with national and international standards and laws regarding the products,

Implement the quality management system we have established and continuously improve its effectiveness.

quality
policy



EPD



TS EN ISO 9001 - 2015



ECOVADIS



TS ISO 45001 - 2018



TS EN ISO 14001 - 2015



ToC

***Light Gauge Steel Framing
Production Process at UMS***

***The Advantages of Light
Gauge Steel Framing***

***LGS Buildings made of LGS
Frames, Trusses and Joists:***

Profile Dimensions

Profile Operations

Profile Specifications

Section Designations and Gross Properties of Standard C Profile	13
Section Designations and Gross Properties of Standard U Profile	14
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Light Gauge Steel Framing Production Process at UMS

In light gauge steel structure manufacturing, we provide the most accurate structural solutions with a competent design and detailing team.



1- Design

Our competent design and detailing team initiates the production process by designing projects from technical and structural perspectives.

2- Production

The machines produce light gauge steel structure profiles according to the prepared project details.

4- On-Site Application

The produced panels are assembled on-site according to the project specifications, completing the light gauge steel structure.

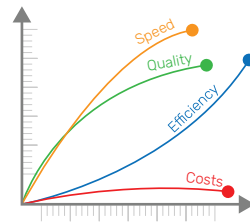
3- Panel Assembly

Our assembly team forms the profiles produced according to the project details into panels and fastens them together with screws.

Advantages of Light Gauge Steel Framing

There are at least 10 reasons why LGS technology is growing faster worldwide than other conventional building technologies:

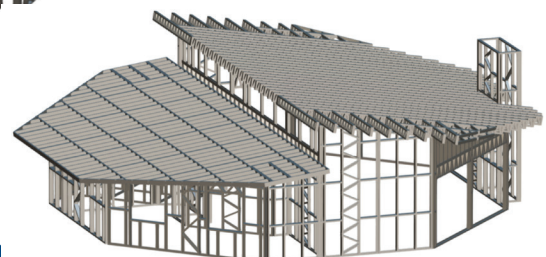
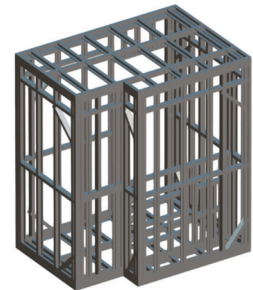
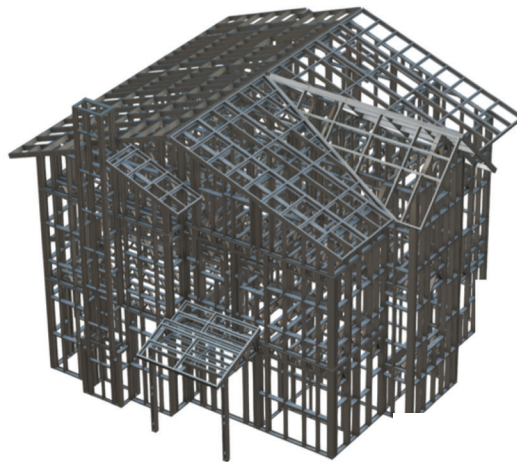
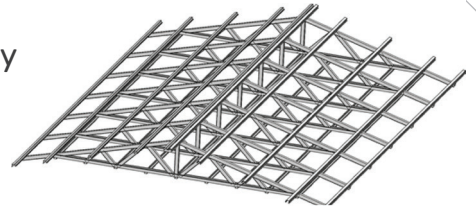
- High Sustainability
- Full Recyclability
- Time Saving
- Cost Reduction
- Design Flexibility
- Weight Reduction
- High Stiffness
- Uniform Quality
- Simple Manufacturing
- Without Formwork



LGS Buildings made of LGS Frames, Trusses and Joists:

As a result of all advantages this technology is being successfully used in more and more building applications:

- Residential Buildings
- Modular Buildings
- Prefabricated Modules
- Bathroom Pods
- Warehouses
- Site Offices
- Temporary Accommodations
- Office Buildings
- Roof Trusses
- Customized Applications





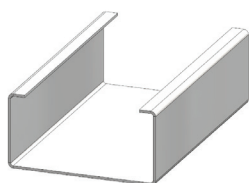
Profile Dimensions



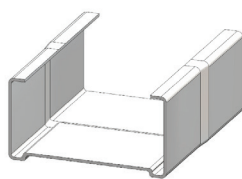
Web Width (w)	63 - 300mm
Flange (h)	41 - 75mm
Return Lip (a)	0 - 20mm
Thickness (t)	0,75 - 2,5mm
Galvanization	100 gr/m ² - 275 gr/m ²
Steel Grade	S220 - S550

Web width dimensions of the profile produced: 63mm - 75mm - 90mm - 92mm - 100mm - 102mm
140mm - 152mm - 200mm - 250mm - 300mm.

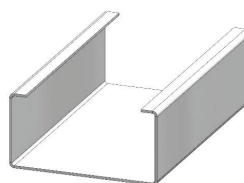
Profile Operations



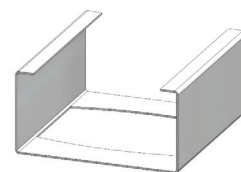
Cut



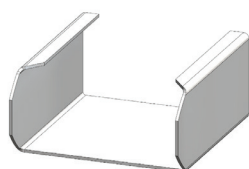
Swage



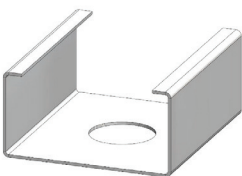
Pre Cut



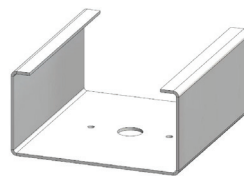
Notch



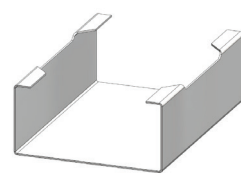
Chamfer



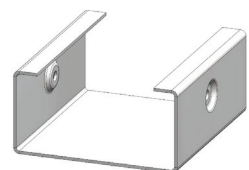
Service Hole



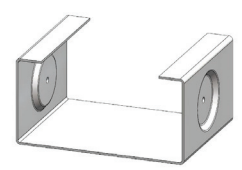
Web Hole + 2 x Index Hole



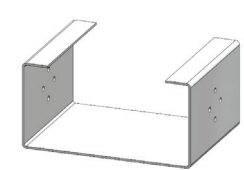
Lip Cut



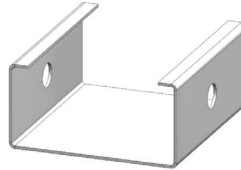
Dimpled Screw/Rivet



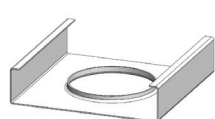
Big Dimpled Screw/Rivet



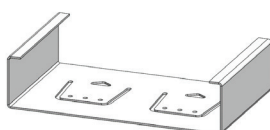
Flange Multi Connection



Flange Hole



Swaged Service Hole



Double Tab



Profile Specifications

Section Designations and Gross Properties of Standard C Profile

Section Designations and Gross Properties													
Section Geometry							Gross Section Properties						
Designation	Web Depth D (mm)	Flange Width B (mm)	Design Thk. t (mm)	Lip Length d (mm)	Bend Radius R (mm)	Area (mm ²)	Weight (kg/m)	I _{yy} (mm ⁴)	S _{yy} (mm ³)	R _y (mm)	I _{zz} (mm ⁴)	S _{zz} (mm ³)	R _z (mm)
C63x45x10x0,8	63	45	0,8	10	0,80	129,048	1,03	90426,894	2907,617	26,471	37110,766	1302,288	16,958
C63x45x10x1,0	63	45	1,00	10	1,00	162,240	1,26	112957,200	3643,781	26,386	46181,733	1614,880	16,872
C63x45x10x1,2	63	45	1,20	10	1,20	195,112	1,49	134970,576	4367,980	26,301	54971,112	1915,457	16,785
C75x45x10x0,8	75	45	0,80	10	0,80	138,168	1,10	133681,321	3603,270	31,105	39430,757	1332,754	16,893
C75x45x10x1,0	75	45	1,00	10	1,00	173,760	1,36	167178,960	4518,350	31,018	49075,568	1653,206	16,806
C75x45x10x1,2	75	45	1,20	10	1,20	209,032	1,61	199988,251	5419,736	30,931	58423,784	1961,567	16,718
C90x45x10x0,8	90	45	0,80	10	0,80	149,568	1,20	201815,815	4525,018	36,733	41932,881	1363,193	16,744
C90x45x10x1,0	90	45	1,00	10	1,00	188,160	1,48	252646,560	5677,451	36,643	52194,560	1691,490	16,655
C90x45x10x1,2	90	45	1,20	10	1,20	226,432	1,75	302542,285	6814,015	36,553	62142,659	2007,614	16,566
C100x45x10x0,8	100	45	0,80	10	0,80	157,168	1,26	256507,645	5171,525	40,399	43399,310	1379,976	16,617
C100x45x10x1,0	100	45	1,00	10	1,00	197,760	1,55	321284,960	6490,605	40,307	54021,543	1712,594	16,528
C100x45x10x1,2	100	45	1,20	10	1,20	238,032	1,84	384942,808	7792,365	40,214	64319,856	2032,993	16,438
C140x45x10x1,0	140	45	1,00	10	1,00	236,160	1,87	699518,560	10065,015	54,425	59844,121	1774,121	15,919
C140x45x10x1,2	140	45	1,20	10	1,20	284,432	2,22	839360,898	12094,537	54,323	71252,789	2106,962	15,827
C140x45x10x1,6	140	45	1,60	10	1,60	380,016	2,90	1113037,852	16084,362	54,120	93013,607	2736,527	15,645
C200x45x10x1,0	200	50	1,00	15	1,00	312,960	2,50	1799271,360	18083,129	75,824	99122,707	2589,678	17,797
C200x45x10x1,2	200	50	1,20	15	1,20	377,232	2,97	2162684,877	21757,393	75,717	118278,585	3083,767	17,707
C200x45x10x1,6	200	50	1,60	15	1,60	504,816	3,90	2877803,660	29010,118	75,503	155091,440	4026,966	17,528
C250x45x10x1,0	250	60	1,20	15	1,20	458,432	3,63	4059321,842	32631,205	94,100	194846,817	4148,643	20,616
C250x45x10x1,2	250	60	1,60	15	1,60	614,016	4,78	5411433,148	43570,315	93,879	256401,409	5441,325	20,435
C250x45x10x1,6	250	60	2,00	15	2,00	768,320	5,90	6739358,080	54349,662	93,657	315161,947	6666,495	20,253
C300x45x10x1,0	300	70	1,60	20	1,60	738,816	5,79	9373996,636	62828,396	112,640	437299,250	8012,763	24,329
C300x45x10x1,2	300	70	2,00	20	2,00	925,120	7,16	11691925,280	78469,297	112,420	539506,898	9857,822	24,149
C300x45x10x1,6	300	70	2,50	20	2,50	1156,200	8,83	14540701,250	97752,613	112,144	661771,077	12049,682	23,924

The calculations were made according to EN 1993-1-3:2006 Annex C.



Section Designations and Gross Properties of Standard U Profile

Section Designations and Gross Properties													
Section Geometry						Gross Section Properties							
Designation	Web Depth D (mm)	Flange Width B (mm)	Design Thk. t (mm)	Lip Length d (mm)	Bend Radius R (mm)	Area (mm ²)	Weight (kg/m)	I _{yy} (mm ⁴)	S _{yy} (mm ³)	R _y (mm)	I _{zz} (mm ⁴)	S _{zz} (mm ³)	R _z (mm)
U63x45x0,8	63	45	0,80	0	0,80	114,456	0,91	80221,687	2579,475	26,474	24490,167	764,658	14,628
U63x45x1,0	63	45	1,00	0	1,00	144,000	1,11	100251,520	3233,920	26,385	30529,946	951,286	14,561
U63x45x1,2	63	45	1,20	0	1,20	173,304	1,32	119840,113	3878,321	26,296	36405,242	1132,038	14,494
U75x45x0,8	75	45	0,80	0	0,80	123,576	0,98	118345,567	3189,907	30,946	25911,639	785,558	14,480
U75x45x1,0	75	45	1,00	0	1,00	155,520	1,21	148071,040	4001,920	30,856	32306,821	977,532	14,413
U75x45x1,2	75	45	1,20	0	1,20	187,224	1,43	177216,265	4802,609	30,766	38529,863	1163,561	14,346
U90x45x0,8	90	45	0,80	0	0,80	134,976	1,08	178589,437	4004,247	36,375	27418,352	806,427	14,253
U90x45x1,0	90	45	1,00	0	1,00	169,920	1,33	223689,040	5026,720	36,283	34189,104	1003,727	14,185
U90x45x1,2	90	45	1,20	0	1,20	204,624	1,57	268010,335	6036,269	36,191	40779,144	1195,011	14,117
U100x45x0,8	100	45	0,80	0	0,80	142,576	1,14	227108,850	4578,807	39,911	28288,968	817,928	14,086
U100x45x1,0	100	45	1,00	0	1,00	179,520	1,41	284621,040	5749,920	39,818	35276,198	1018,159	14,018
U100x45x1,2	100	45	1,20	0	1,20	216,224	1,67	341207,881	6907,042	39,724	42077,548	1212,332	13,950
U140x45x1,0	140	45	1,00	0	1,00	217,920	1,72	622909,040	8962,720	53,464	38666,781	1060,196	13,320
U140x45x1,2	140	45	1,20	0	1,20	262,624	2,04	747910,068	10776,802	53,365	46124,165	1262,765	13,252
U140x45x1,6	140	45	1,60	0	1,60	351,312	2,67	993049,009	14350,419	53,167	60440,142	1649,745	13,116
U200x45x1,0	200	50	1,00	0	1,00	285,120	2,27	1561863,440	15697,120	74,013	56661,660	1351,796	14,097
U200x45x1,2	200	50	1,20	0	1,20	343,824	2,70	1878111,524	18894,482	73,908	67677,170	1612,688	14,030
U200x45x1,6	200	50	1,60	0	1,60	460,512	3,55	2501254,513	25214,259	73,698	88915,655	2113,793	13,895
U250x45x1,0	250	60	1,20	0	1,20	425,024	3,36	3599857,609	28937,762	92,031	119371,422	2360,810	16,759
U250x45x1,2	250	60	1,60	0	1,60	569,712	4,43	4803174,081	38672,899	91,820	157456,493	3108,034	16,625
U250x45x1,6	250	60	2,00	0	2,00	713,440	5,46	5987209,387	48283,947	91,608	194011,368	3822,263	16,491
U300x45x1,0	300	70	1,60	0	1,60	678,912	5,31	8204737,649	54991,539	109,932	254351,910	4292,886	19,356
U300x45x1,2	300	70	2,00	0	2,00	850,640	6,56	10240285,253	68726,747	109,719	314296,760	5296,040	19,222
U300x45x1,6	300	70	2,50	0	2,50	1063,950	8,10	12746006,328	85687,438	109,453	386300,208	6496,227	19,055

The calculations were made according to EN 1993-1-3:2006 Annex C.

Torisional Properties of Standard C Profile

Torisional Properties									
Designation	Design Thk. t (mm)	It (mm ⁴)	Iw (mm ⁴)	ysc (mm)	zcs (mm)	lyz (mm ⁴)	lyw (mm)	Izw (mm)	Iww (mm ⁴)
C63x45x10x0,8	0,8	24,846	33250661,198	-22,561	31,100	0,000	-1154144,809	-2040085,494	115170128,999
C63x45x10x1,0	1,00	49,84	40979206,086	-22,426	31,000	0,000	-1431633,738	-2533192,640	142169554,685
C63x45x10x1,2	1,20	87,514	48306661,521	-22,292	30,900	0,000	-1698607,363	-3008716,812	167862890,631
C75x45x10x0,8	0,80	26,602	47072601,675	-21,780	37,100	0,000	-1462881,074	-2911572,155	164759378,137
C75x45x10x1,0	1,00	53,379	58113419,414	-21,647	37,000	0,000	-1815796,006	-3618929,600	203636984,709
C75x45x10x1,2	1,20	93,758	68623126,649	-21,514	36,900	0,000	-2155837,638	-4302577,082	240739821,033
C90x45x10x0,8	0,80	28,797	68718208,741	-20,893	44,600	0,000	-1870206,506	-4216565,929	240226717,983
C90x45x10x1,0	1,00	57,803	84967609,164	-20,762	44,500	0,000	-2322657,920	-5245539,200	297235667,520
C90x45x10x1,2	1,20	101,562	100490440,040	-20,632	44,400	0,000	-2759134,053	-6241936,225	351777222,793
C100x45x10x0,8	0,80	30,26	86002698,560	-20,349	49,600	0,000	-2152605,788	-5219670,077	298986930,998
C100x45x10x1,0	1,00	60,752	106422889,414	-20,220	49,500	0,000	-2674066,355	-6496265,600	370141313,050
C100x45x10x1,2	1,20	106,765	125964851,709	-20,090	49,400	0,000	-3177400,874	-7733628,620	438299617,659
C140x45x10x1,0	1,00	72,548	222973226,174	-18,341	69,500	0,000	-4159166,408	-12829731,200	747342847,422
C140x45x10x1,2	1,20	127,577	264451353,238	-18,217	69,400	0,000	-4944943,586	-15290688,601	886181843,542
C140x45x10x1,6	1,60	308,269	342545673,020	-17,970	69,200	0,000	-6436541,627	-20001036,241	1147368411,229
C200x50x15x1,0	1,00	96,141	778828596,138	-20,136	99,500	0,000	-9862709,370	-36229600,400	2489676786,426
C200x50x15x1,2	1,20	169,201	926911911,364	-20,017	99,400	0,000	-11756891,353	-43289568,650	2962056302,005
C200x50x15x1,6	1,60	409,507	1209065631,755	-19,779	99,200	0,000	-15385070,897	-56918863,566	3861038835,249
C250x60x15x1,2	1,20	205,622	2335327332,639	-22,745	124,400	0,000	-24238944,004	-92329819,223	7450706076,416
C250x60x15x1,6	1,60	498,09	3060921364,162	-22,510	124,200	0,000	-31845054,978	-121809390,909	9757962254,610
C250x60x15x2,0	2,00	983,859	3747544233,657	-22,274	124,000	0,000	-39080081,387	-150115197,867	11937201185,707
C300x70x20x1,6	1,60	599,328	7646820666,657	-27,009	149,200	0,000	-65245048,075	-253178475,863	24219376680,809
C300x70x20x2,0	2,00	1184,647	9402505741,880	-26,774	149,000	0,000	-80386527,814	-313039178,667	29761397875,614
C300x70x20x2,5	2,50	2332,287	11485192617,921	-26,481	148,750	0,000	-98438447,723	-385052436,914	36324488664,675

The calculations were made according to EN 1993-1-3:2006 Annex C.



Torisonal Properties of Standard U Profile

Torisonal Properties									
Designation	Design Thk. t (mm)	It (mm ⁴)	Iw (mm ⁴)	ysc (mm)	zcs (mm)	lyz (mm ⁴)	lyw (mm)	Izw (mm)	Iww (mm ⁴)
U63x45x0,8	0,80	22,037	16608651,483	-17,901	31,100	0,000	-761644,189	-1436080,910	66003651,757
U63x45x1,0	1,00	44,237	20570922,154	-17,816	31,000	0,000	-946428,314	-1786076,160	81730845,082
U63x45x1,2	1,20	77,733	24370682,391	-17,730	30,900	0,000	-1124921,977	-2124825,008	96804979,332
U75x45x0,8	0,80	23,792	24928804,215	-17,268	37,100	0,000	-961321,813	-2043647,321	95884513,636
U75x45x1,0	1,00	47,776	30913828,052	-17,183	37,000	0,000	-1195352,367	-2544368,640	118862851,034
U75x45x1,2	1,20	83,976	36669238,398	-17,098	36,900	0,000	-1421751,959	-3030113,823	140941970,894
U90x45x0,8	0,80	25,987	38185241,257	-16,538	44,600	0,000	-1222858,489	-2953437,932	141567459,696
U90x45x1,0	1,00	52,199	47404003,137	-16,453	44,500	0,000	-1521415,116	-3680413,440	175661766,899
U90x45x1,2	1,20	91,781	56290436,875	-16,369	44,400	0,000	-1810593,979	-4387045,619	208492104,752
U100x45x0,8	0,80	27,451	48884606,546	-16,084	49,600	0,000	-1403132,825	-3652762,907	177230135,089
U100x45x1,0	1,00	55,149	60719155,200	-16,000	49,500	0,000	-1746171,784	-4553936,640	220017644,725
U100x45x1,2	1,20	96,984	72140714,607	-15,916	49,400	0,000	-2078630,87	-5430753,717	261262373,484
U140x45x1,0	1,00	66,945	133954228,534	-14,412	69,500	0,000	-2687341,302	-8977309,440	450104630,719
U140x45x1,2	1,20	117,796	159370380,967	-14,331	69,400	0,000	-3201017,043	-10718281,307	535124396,919
U140x45x1,6	1,60	284,984	207741843,233	-14,169	69,200	0,000	-4182457,803	-14070717,583	696538841,034
U200x50x1,0	1,00	87,589	412034861,940	-14,611	99,500	0,000	-5637835,150	-22819680,240	1306407485,255
U200x50x1,2	1,20	154,217	491310442,387	-14,533	99,400	0,000	-6727110,656	-27294202,041	1556646172,239
U200x50x1,6	1,60	373,567	643325642,156	-14,377	99,200	0,000	-8820432,956	-35961571,836	2035347000,445
U250x60x1,2	1,20	190,637	1362892314,156	-17,241	124,400	0,000	-14849804,95	-62065949,267	4280300947,546
U250x60x1,6	1,60	462,15	1792968080,407	-17,087	124,200	0,000	-19556096,399	-82071710,383	5624192430,377
U250x60x2,0	2,00	913,584	2203386633,936	-16,933	124,000	0,000	-24057409,657	-101380733,440	6903173823,869
U300x70x1,6	1,60	550,733	4191408159,170	-19,802	149,200	0,000	-37949304,923	-162470474,210	13070689918,427
U300x70x2,0	2,00	1089,273	5167962784,030	-19,649	149,000	0,000	-46830217,304	-201208551,040	16099156692,122
U300x70x2,5	2,50	2146,2	6334662521,333	-19,457	148,750	0,000	-57462155,900	-248002809,961	19707622138,370

The calculations were made according to EN 1993-1-3:2006 Annex C.

Effective Section Properties of Standard C Profile

Effective Section Properties									
Design Thk.									
Designation	t (mm)	I _{ye} (mm ⁴)	I _{we} (mm ⁴)	F _{ya} (MPa)	N _{t,Rd} (w/f _{ya}) (kN)	N _{t,Rd} (kN)	M _{c,Re} (kN-m)	N _{c,Rd} (kN)	V _{b,Rd} (kN)
C63x45x10x0,8	0,80	75013,612	2082,341	358,334	48,676	47,544	0,729	23,684	7,612
C63x45x10x1,0	1,00	101045,421	2950,026	360,688	60,956	59,150	1,033	36,779	11,893
C63x45x10x1,2	1,20	127221,245	3860,946	363,067	73,281	70,644	1,351	51,445	15,054
C75x45x10x0,8	0,80	108440,955	2485,373	357,784	52,036	50,904	0,870	23,415	7,612
C75x45x10x1,0	1,00	149581,842	3670,657	359,980	65,156	63,350	1,285	36,613	11,893
C75x45x10x1,2	1,20	188133,536	4785,333	362,197	78,321	75,684	1,675	51,512	17,127
C90x45x10x0,8	0,80	159249,137	2984,508	357,191	56,236	55,104	1,045	23,420	6,746
C90x45x10x1,0	1,00	223500,918	4528,334	359,216	70,406	68,600	1,585	36,315	11,893
C90x45x10x1,2	1,20	284046,296	6011,799	361,259	84,621	81,984	2,104	51,405	17,127
C100x45x10x0,8	0,80	198716,487	3314,120	356,843	59,036	57,904	1,160	23,371	6,066
C100x45x10x1,0	1,00	279727,561	5034,979	358,769	73,906	72,100	1,762	36,089	11,893
C100x45x10x1,2	1,20	360849,204	6868,193	360,711	88,821	86,184	2,404	51,269	17,127
C140x45x10x1,0	1,00	572102,299	7044,271	357,343	87,906	86,100	2,465	35,480	8,455
C140x45x10x1,2	1,20	746146,344	9712,548	358,963	105,621	102,984	3,399	50,514	14,632
C140x45x10x1,6	1,60	1078910,136	15075,296	362,238	141,186	136,416	5,276	83,453	30,447
C200x50x15x1,0	1,00	1322422,920	10759,896	355,541	115,906	114,100	3,766	37,185	5,906
C200x50x15x1,2	1,20	1791465,061	15513,198	356,758	139,221	136,584	5,430	55,521	10,216
C200x50x15x1,6	1,60	2667830,766	24939,349	359,212	185,986	181,216	8,729	94,896	24,264
C250x60x15x1,2	1,20	2948165,731	19168,070	355,561	168,621	165,984	6,709	53,147	8,163
C250x60x15x1,6	1,60	4548439,278	32013,455	357,574	225,186	220,416	11,205	92,355	19,380
C250x60x15x2,0	2,00	6140434,945	45687,454	359,604	281,930	274,400	15,991	138,107	37,912
C300x70x20x1,6	1,60	7382901,897	41688,392	356,295	269,986	265,216	14,591	97,641	16,133
C300x70x20x2,0	2,00	10166032,181	60895,347	357,976	337,930	330,400	21,313	149,820	31,551
C300x70x20x2,5	2,50	13517369,896	85118,465	360,095	423,111	411,250	29,791	217,136	61,727

The calculations were made according to EN 1993-1-3:2006 Annex C. Material properties taken into account in the calculations: F_y = 350 Mpa, F_u = 420 Mpa



Effective Section Properties of Standard U Profile

Effective Section Properties									
Design Thk.									
Designation	t (mm)	I _{ye} (mm ⁴)	I _{we} (mm ⁴)	F _{ya} (MPa)	N _{t,Rd} (w/f _{ya}) (kN)	N _{t,Rd} (kN)	M _{c,Re} (kN-m)	N _{c,Rd} (kN)	V _{b,Rd} (kN)
U63x45x0,8	0,80	50104,644	1236,378	354,698	42,734	42,168	0,433	14,839	7,612
U63x45x1,0	1,00	67993,512	1750,761	356,021	53,403	52,500	0,613	22,772	11,893
U63x45x1,2	1,20	85461,574	2257,704	357,355	64,067	62,748	0,790	32,057	15,054
U75x45x0,8	0,80	73041,203	1502,734	354,352	46,094	45,528	0,526	15,040	7,612
U75x45x1,0	1,00	103288,822	2270,020	355,575	57,603	56,700	0,795	23,174	11,893
U75x45x1,2	1,20	129308,707	2908,452	356,809	69,107	67,788	1,018	32,765	17,127
U90x45x0,8	0,80	108406,603	1842,917	353,984	50,294	49,728	0,645	15,214	6,746
U90x45x1,0	1,00	153890,922	2790,517	355,103	62,853	61,950	0,977	23,524	11,893
U90x45x1,2	1,20	200378,767	3810,920	356,230	75,407	74,088	1,334	33,382	17,127
U100x45x0,8	0,80	136227,760	2073,563	353,772	53,094	52,528	0,726	15,302	6,066
U100x45x1,0	1,00	193654,308	3138,398	354,830	66,353	65,450	1,098	23,698	11,893
U100x45x1,2	1,20	256145,660	4391,907	355,895	79,607	78,288	1,537	33,689	17,127
U140x45x1,0	1,00	404333,464	4569,777	353,979	80,353	79,450	1,599	24,145	8,455
U140x45x1,2	1,20	536957,888	6385,419	354,854	96,407	95,088	2,235	34,475	14,632
U140x45x1,6	1,60	828572,911	10775,991	356,619	128,497	126,112	3,772	59,879	30,447
U200x50x1,0	1,00	905531,067	6865,185	353,041	104,853	103,950	2,403	24,544	5,906
U200x50x1,2	1,20	1211580,635	9595,323	353,708	125,807	124,488	3,358	35,176	10,216
U200x50x1,6	1,60	1890930,709	16187,293	355,049	167,697	165,312	5,666	61,583	24,264
U250x60x1,2	1,20	2061920,519	12490,330	352,999	155,207	153,888	4,372	35,621	8,163
U250x60x1,6	1,60	3252924,824	21122,723	354,082	206,897	204,512	7,393	62,664	19,380
U250x60x2,0	2,00	4579037,608	31616,526	355,171	258,565	254,800	11,066	96,502	37,912
U300x70x1,6	1,60	5045331,090	26234,579	353,425	246,097	243,712	9,182	63,401	16,133
U300x70x2,0	2,00	7152405,496	39336,267	354,337	307,565	303,800	13,768	97,966	31,551
U300x70x2,5	2,50	10037465,38	58772,411	355,485	384,368	378,438	20,570	150,526	61,727

The calculations were made according to EN 1993-1-3:2006 Annex C. Material properties taken into account in the calculations: F_y = 350 Mpa, F_u = 420 Mpa



LIGHT GAUGE STEEL (LGS) FRAMING



TSE EN 14353
TS EN 14195
TSE K 236



EN ISO 9001
20100183003915
EN ISO 14001
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F: 0312 354 01 07

Profile - Factory

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