

**ASBP** The Alliance  
for Sustainable  
Building Products

**PATRON MEMBER**

**CST**

**CLEVELAND STEEL & TUBES LTD**

# Supplying reused steel for the Entopia Building and an update on the DISRUPT Innovate UK project

**CISL Entopia Building – Material Learnings and Reuse**

Thursday 29<sup>th</sup> September 2022

# Can we reuse?

CE Marking 1090-1/1090-2 –

not specific but “allows” for reuse

- “products from non-harmonised standards”  
section 5.3
- specification is key – if specify S355 it must be made to harmonised standard
- if made since 2012 must be CE marked, older material NO
- properties must be specified/proven

- Clause 12.2.1

Constituent products

TABLE 1 ‘NOTE 1 – these documents include inspection certificates, test reports, declaration of compliance as relevant’

**So this now is reflected in EN1090-1 and EN1090-2 and very clearly lists inspection documents that are NOT 3.1 certs**

*Clause 12.2.1 Table 1 ‘NOTE 2 – This documentation check is intended to obviate the need for testing products generally.’*

## 5 Constituent products

### 5.1 General

Generally constituent products to be used for the execution of steel structures shall be selected from the relevant European Standards listed in the following clauses. If constituent products that are not covered by the standards listed are to be used, their properties shall be specified.

Definitions and requirements of EN 10021 shall apply together with those of the relevant European product standard.

### 5.2 Identification, inspection documents and traceability

The properties of supplied constituent products shall be documented in a way that enables them to be compared to the specified properties. Their conformity with the relevant product standard shall be checked in accordance with 12.2.

For metallic products, the inspection documents according to EN 10204 shall be as listed in Table 1.

# The Requirement

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66m – 203 x 133 x 24 UB – S355

72m – 152 x 152 x 23 UC – S355

30m – 114.3 x 6,3mm CHS – S355

*"All components are short lengths"*

*"Prices are up almost 60% which is insane"*

*The bigger problem is that scrap is soaring so getting material is going to be a test, talk about bad timing.*

*The joys of commodity goods"*

*"Excellent, galvanisers love rust"*

# The Material – “Star Wars”

## Sack Lunch Steelwork

Blue - To check

Location	152x89x16UB			178x102x19UB			203x102x23UB			203x133x25UB			152x152x23UC		
	No.	Length	Total	No.	Length	Total	No.	Length	Total	No.	Length	Total	No.	Length	Total
Market Square							2	2.70	5.40				5	4.25	21.25
Kingo Jet										6	6.50	39.00			
Spaceship - Bridge										6	4.00	24.00			
Spaceship - Lab										4	4.72	18.88			
										8	4.11	32.88			
										8	4.05	32.40			
										2	2.97	5.94			
										4	3.51	14.04			
										8	5.20	41.60			
										4	5.45	21.80			
										8	4.05	32.40			
										4	4.11	16.44			
										8	5.20	41.60			
Spaceship - Walkways										4	5.45	21.80			
										12	6.19	74.28			
										8	6.09	48.72			
										4	7.31	29.24			
										2	4.19	8.38			
										19	4.59	87.21			
										1	2.76	2.76			
Other Workshop Scrap (excluding grey steel)	3	4.50	13.50	12	2.90	34.80	2	3.75	7.50						
				11	2.40	26.40									
				1	1.68	1.68									
<b>Total Metres</b>			<b>13.50</b>			<b>62.88</b>			<b>39.65</b>			<b>593.37</b>			<b>21.25</b>
<b>Total Tonnage</b>	0.016	<b>0.22</b>		0.019	<b>1.19</b>		0.023	<b>0.91</b>		0.025	<b>14.83</b>		0.023	<b>0.49</b>	



# The Material – diverted scrap

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# Fit For Purpose



Original certs and even some labels.

Single test piece sent to lab to validate cert then original certs used

Dented material had all original provenance ...

0000681487/1 0000681487

A61  
ArcelorMittal Olaberria-Bergara  
ArcelorMittal Europe - Long Products  
CARRETERA MADRID - IRUN, KM. 419  
20212 OLABERRIA (Gipuzkoa)  
TELEF. (943) 80.50.00 - FAX (943) 88.04.04

09-0059  
AMD-2008-CPR-13-1  
EN 10025-1:2004  
EN 10025/92

**CERTIFICADO DE CALIDAD - QUALITY CERTIFICATE OLA P-64425**

SIZE	LENGTH	BUNDLES	PIECES BUNDLES	TOTAL PIECES	WEIGHT BUNDLES	TOTAL WEIGHT	HEAT
U COLUMNS 254x254x89	11	1	4	4	3912	3.912	190249
U COLUMNS 254x254x89	14	1	4	4	4978	4.978	190264,190267
U COLUMNS 254x254x89	15,5	1	4	4	5512	5.512	190261,190263
TOTAL BUNDLES		54	TOTAL WEIGHT		228.518 Kg.		

A62 EN 10204/3.1 OLA P-64425 333  
S 355 J0+M - EN 10025-2/2004 SUITABLE FOR GALVANIZING (R0119002600)

Tolerancias dimensionales y de forma - Tolerances on shape and dimensions : EN 10.034

MATERIAL SIZE	COLADA HEAT	COMPOSICION QUIMICA (%)													Cev			
		C	Mn	Si	P	S	N	V	Cr	Cu	Ni	Mo	Nb					
UC-152x152x23	189825	.06	.84	.19	.018	.019	.011	.013	.150	.360	.190	.032	.018					.27
UC-152x152x23	189826	.06	1.00	.20	.017	.018	.011	.012	.120	.360	.180	.040	.019					.31
UC-152x152x23	189827	.06	.95	.20	.018	.020	.009	.012	.110	.360	.180	.039	.015					.29
UC-152x152x23	189828	.06	.89	.18	.019	.021	.010	.011	.130	.360	.210	.035	.014					.29
UC-152x152x23	189829	.07	.91	.17	.018	.020	.011	.012	.160	.400	.190	.037	.017					.30
UC-152x152x23	189830	.08	.91	.17	.018	.022	.009	.013	.150	.360	.180	.043	.018					.31
UC-152x152x23	189831	.07	.87	.16	.015	.021	.008	.011	.120	.400	.180	.035	.014					.28
UC-152x152x23	189832	.09	.89	.20	.016	.020	.010	.010	.130	.430	.180	.038	.016					.31
UC-152x152x30	189801	.09	1.04	.19	.029	.021	.010	.012	.130	.360	.150	.031	.016					.33
UC-152x152x30	189802	.07	.93	.19	.027	.021	.009	.010	.130	.360	.160	.029	.016					.29
UC-152x152x30	189803	.06	1.05	.19	.025	.021	.009	.014	.130	.360	.160	.030	.017					.31
UC-152x152x30	189804	.07	.90	.20	.021	.022	.008	.013	.130	.360	.160	.033	.018					.29
UC-152x152x30	189805	.07	.93	.18	.021	.025	.008	.014	.130	.360	.130	.029	.022					.30
UC-152x152x30	189809	.09	.91	.22	.028	.020	.011	.011	.200	.370	.190	.039	.018					.33
UC-152x152x30	189810	.09	.86	.20	.023	.017	.011	.010	.140	.340	.160	.030	.017					.30
UC-152x152x30	189811	.08	.96	.24	.017	.021	.011	.011	.160	.450	.150	.026	.021					.32
UC-152x152x30	189820	.09	.98	.20	.019	.026	.012	.011	.140	.380	.180	.034	.018					.32
UC-152x152x37	189888	.07	.92	.19	.021	.021	.011	.012	.150	.470	.200	.058	.022					.31
UC-152x152x37	189891	.07	.95	.21	.027	.021	.011	.013	.230	.430	.190	.045	.026					.33
UC-152x152x37	189892	.07	.96	.22	.027	.022	.011	.013	.220	.400	.200	.041	.024					.33
UC-152x152x37	189902	.08	.93	.21	.018	.019	.010	.011	.190	.440	.200	.048	.019					.33
UC-152x152x37	189906	.07	.94	.22	.025	.023	.010	.013	.230	.420	.210	.041	.024					.33
UC-203x203x46	189800	.08	1.09	.19	.024	.020	.008	.012	.110	.360	.130	.027	.025					.32
UC-203x203x46	189804	.07	.90	.20	.021	.022	.008	.013	.130	.360	.160	.033	.018					.29
UC-203x203x46	189811	.08	.96	.24	.017	.021	.011	.011	.160	.450	.150	.026	.021					.32
UC-203x203x46	189820	.09	.98	.20	.019	.026	.012	.011	.140	.380	.180	.034	.018					.32
UC-203x203x46	189829	.07	.91	.17	.018	.020	.011	.012	.160	.400	.190	.037	.017					.30
UC-203x203x46	189895	.10	.88	.19	.023	.016	.010	.011	.170	.420	.180	.033	.020					.32
UC-203x203x60	189859	.07	.96	.18	.028	.017	.011	.011	.190	.440	.180	.053	.016					.32
UC-203x203x60	189916	.07	.91	.21	.029	.019	.011	.011	.190	.470	.160	.030	.021					.31
UC-203x203x71	189920	.07	.97	.21	.025	.022	.010	.012	.180	.470	.160	.030	.021					.31
UC-203x203x71	189921	.07	.97	.21	.024	.020	.011	.012	.180	.380	.140	.029	.020					.31
UC-203x203x86	189924	.08	.90	.22	.021	.019	.010	.012	.180	.410	.160	.036	.018					.32
UC-203x203x86	189925	.07	.93	.22	.026	.019	.010	.012	.280	.420	.150	.038	.014					.33
UC-254x254x73	190197	.08	.98	.20	.020	.018	.009	.012	.130	.460	.180	.033	.023					.33
UC-254x254x73	190199	.12	.96	.18	.021	.019	.009	.013	.160	.460	.190	.037	.017					.37

ArcelorMittal Olaberria-Bergara inscrita en el Registro Mercantil de Gipuzkoa, TOMO 033 DEL LIBRO DE ENSCRIPCIONES, HOJA 88-8817, FOLIO 137, INSCRIPCION N.º N.º VA/JAF. (88) 82881981 Pág: 2/4

# Finished Item

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# DISRUPT Steel reuse project



**Project aim:** Develop a blueprint/guide for businesses to enter the market of steel reuse

Sponsor



Partners



Supporter





# DISRUPT Steel reuse project

**ASBP** The Alliance  
for Sustainable  
Building Products

**DISRUPT**  
Delivering Innovative Steel ReUse Project

## Steel reuse case studies:

Entopia building

Holbein Gardens

55 Great Suffolk Street

Meridian Water project

Brent Cross Town Primary Substation

Elephant & Castle Town centre redevelopment

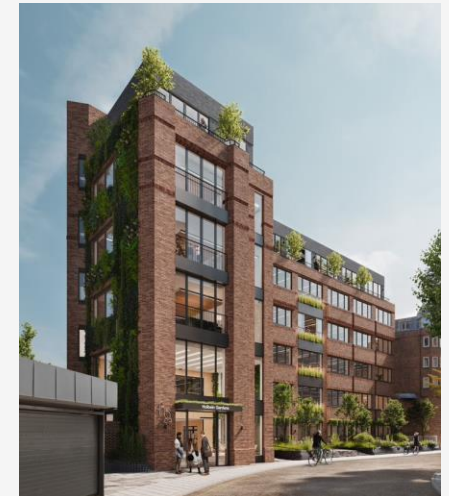
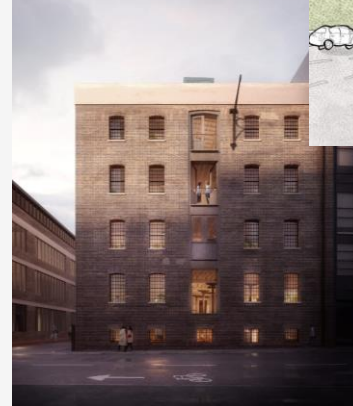
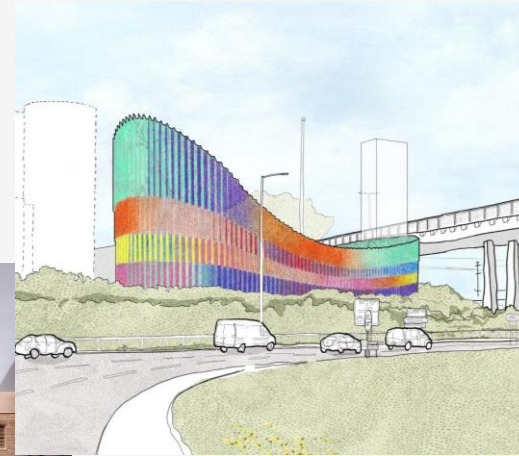
French Railways House and 50 Jermyn Street

Network Building

Agricultural buildings

Domestic extension projects

Subsea drilling out of the wind farms



# Thank you



Contact details...