

**SLOVENSKI STANDARD  
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**Izvedba jeklenih in aluminijastih konstrukcij - 2. del: Tehnične zahteve za izvedbo jeklenih konstrukcij**

Execution of steel structures and aluminium structures - Part 2: Technical requirements for steel structures

Ausführung von Stahltragwerken und Aluminiumtragwerken - Teil 2: Technische Regeln für die Ausführung von Stahltragwerken

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**Execution of steel structures and aluminium structures - Part 2:  
 Technical requirements for steel structures**

Exécution des structures en acier et des structures en aluminium - Partie 2: Exigences techniques pour les structures en acier

Ausführung von Stahltragwerken und Aluminiumtragwerken  
 - Teil 2: Technische Regeln für die Ausführung von Stahltragwerken

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
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## Contents

Page

<b>Foreword.....</b>	<b>9</b>
<b>Introduction.....</b>	<b>10</b>
<b>1 Scope .....</b>	<b>11</b>
<b>2 Normative references .....</b>	<b>12</b>
<b>2.1 General.....</b>	<b>12</b>
<b>2.2 Constituent products .....</b>	<b>12</b>
<b>2.2.1 Steels .....</b>	<b>12</b>
<b>2.2.2 Steel castings.....</b>	<b>14</b>
<b>2.2.3 Welding consumables.....</b>	<b>14</b>
<b>2.2.4 Mechanical fasteners .....</b>	<b>15</b>
<b>2.2.5 High strength cables .....</b>	<b>17</b>
<b>2.2.6 Structural bearings .....</b>	<b>17</b>
<b>2.3 Preparation .....</b>	<b>17</b>
<b>2.4 Welding .....</b>	<b>17</b>
<b>2.5 Testing .....</b>	<b>19</b>
<b>2.6 Erection.....</b>	<b>19</b>
<b>2.7 Corrosion protection.....</b>	<b>20</b>
<b>2.8 Tolerances .....</b>	<b>20</b>
<b>2.9 Miscellaneous .....</b>	<b>20</b>
<b>3 Terms and definitions .....</b>	<b>21</b>
<b>4 Specifications and documentation</b> <small>SIST EN 1090-2:2008+A1:2012</small>	<b>23</b>
<b>4.1 Execution Specification</b> <small><a href="#">/standards.iteh.ai/catalog/standards/sist/fc26e6c2-bb7d-4c98-9e43-592d82h551a/sist-en-1090-2-2008a1-2012</a></small>	<b>23</b>
<b>4.1.1 General.....</b>	<b>23</b>
<b>4.1.2 Execution classes.....</b>	<b>23</b>
<b>4.1.3 Preparation grades .....</b>	<b>23</b>
<b>4.1.4 Geometrical tolerances .....</b>	<b>24</b>
<b>4.2 Constructor's documentation .....</b>	<b>24</b>
<b>4.2.1 Quality documentation .....</b>	<b>24</b>
<b>4.2.2 Quality plan .....</b>	<b>24</b>
<b>4.2.3 Safety of the erection works .....</b>	<b>25</b>
<b>4.2.4 Execution documentation .....</b>	<b>25</b>
<b>5 Constituent products .....</b>	<b>25</b>
<b>5.1 General.....</b>	<b>25</b>
<b>5.2 Identification, inspection documents and traceability .....</b>	<b>25</b>
<b>5.3 Structural steel products .....</b>	<b>26</b>
<b>5.3.1 General.....</b>	<b>26</b>
<b>5.3.2 Thickness tolerances .....</b>	<b>28</b>
<b>5.3.3 Surface conditions .....</b>	<b>28</b>
<b>5.3.4 Special properties .....</b>	<b>29</b>
<b>5.4 Steel castings .....</b>	<b>29</b>
<b>5.5 Welding consumables .....</b>	<b>29</b>
<b>5.6 Mechanical fasteners .....</b>	<b>31</b>
<b>5.6.1 General.....</b>	<b>31</b>
<b>5.6.2 Terminology .....</b>	<b>31</b>
<b>5.6.3 Structural bolting assemblies for non preloaded applications .....</b>	<b>31</b>
<b>5.6.4 Structural bolting assemblies for preloading .....</b>	<b>31</b>
<b>5.6.5 Direct tension indicators.....</b>	<b>32</b>
<b>5.6.6 Weather resistant assemblies .....</b>	<b>32</b>
<b>5.6.7 Foundation bolts.....</b>	<b>32</b>

5.6.8	Locking devices.....	32
5.6.9	<i>A1</i> Washers <i>(A1)</i> .....	32
5.6.10	Hot rivets .....	33
5.6.11	Fasteners for thin gauge components .....	33
5.6.12	Special fasteners .....	33
5.6.13	Delivery and identification.....	33
5.7	Studs and shear connectors .....	34
5.8	Grouting materials.....	34
5.9	Expansion joints for bridges.....	34
5.10	High strength cables, rods and terminations .....	34
5.11	Structural bearings.....	35
6	Preparation and assembly.....	35
6.1	General .....	35
6.2	Identification .....	35
6.3	Handling and storage .....	35
6.4	Cutting .....	38
6.4.1	General .....	38
6.4.2	Shearing and nibbling.....	38
6.4.3	Thermal cutting.....	38
6.4.4	Hardness of free edge surfaces .....	39
6.5	Shaping .....	39
6.5.1	General .....	39
6.5.2	Hot forming .....	40
6.5.3	Flame straightening .....	40
6.5.4	Cold forming .....	40
6.6	Holing.....	42
6.6.1	Dimensions of holes .....	42
6.6.2	Tolerances on hole diameter for bolts and pins .....	43
6.6.3	Execution of holing .....	43
6.7	Cut outs .....	44
6.8	Full contact bearing surfaces .....	45
6.9	Assembly.....	45
6.10	Asassembly check .....	46
7	Welding.....	46
7.1	General .....	46
7.2	Welding plan .....	46
7.2.1	Requirements for a welding plan.....	46
7.2.2	Content of a welding plan.....	46
7.3	Welding processes.....	47
7.4	Qualification of welding procedures and welding personnel .....	48
7.4.1	Qualification of welding procedures .....	48
7.4.2	Welders and welding operators .....	50
7.4.3	Welding coordination .....	50
7.5	Preparation and execution of welding .....	52
7.5.1	Joint preparation .....	52
7.5.2	Storage and handling of welding consumables .....	53
7.5.3	Weather protection.....	53
7.5.4	Assembly for welding .....	54
7.5.5	Preheating .....	54
7.5.6	Temporary attachments .....	54
7.5.7	Tack welds .....	54
7.5.8	Fillet welds .....	55
7.5.9	Butt welds .....	55
7.5.10	Welds on steels with improved atmospheric corrosion resistance .....	56
7.5.11	Branch connections .....	56
7.5.12	Stud welding .....	56
7.5.13	Slot and plug welds .....	56
7.5.14	Spot welds for thin gauge components .....	57

## EN 1090-2:2008+A1:2011 (E)

7.5.15	Other weld types .....	57
7.5.16	Post-weld heat treatment .....	57
7.5.17	Execution of welding .....	57
7.5.18	Welding of bridge decks .....	58
7.6	Acceptance criteria .....	58
7.7	Welding of stainless steels .....	59
7.7.1	Amendments to EN 1011-1 requirements .....	59
7.7.2	Amendments to EN 1011-3 requirements .....	60
7.7.3	Welding dissimilar steels .....	61
8	Mechanical fastening .....	61
8.1	General .....	61
8.2	Use of bolting assemblies .....	61
8.2.1	General .....	61
8.2.2	Bolts .....	62
8.2.3	Nuts .....	62
8.2.4	Washers .....	62
8.3	Tightening of non-preloaded bolts .....	63
8.4	Preparation of contact surfaces in slip resistant connections .....	63
8.5	Tightening of preloaded bolts .....	64
8.5.1	General .....	64
8.5.2	Torque reference values .....	66
8.5.3	Torque method .....	66
8.5.4	Combined method .....	66
8.5.5	HRC method .....	67
8.5.6	Direct tension indicator method .....	68
8.6	Fit bolts .....	68
8.7	Hot riveting .....	68
8.7.1	Rivets .....	68
8.7.2	Installation of rivets .....	68
8.7.3	Acceptance criteria .....	69
8.8	Fastening of thin gauge components .....	69
8.8.1	General .....	69
8.8.2	Use of self-tapping and self-drilling screws .....	70
8.8.3	Use of blind rivets .....	70
8.8.4	Fastening sidelaps .....	71
8.9	Use of special fasteners and fastening methods .....	71
8.10	Galling and seizure of stainless steels .....	71
9	Erection .....	72
9.1	General .....	72
9.2	Site conditions .....	72
9.3	Erection method .....	73
9.3.1	Design basis for the erection method .....	73
9.3.2	Constructor's erection method .....	73
9.4	Survey .....	74
9.4.1	Reference system .....	74
9.4.2	Position points .....	75
9.5	Supports, anchors and bearings .....	75
9.5.1	Inspection of supports .....	75
9.5.2	Setting out and suitability of supports .....	75
9.5.3	Maintaining suitability of supports .....	75
9.5.4	Temporary supports .....	75
9.5.5	Grouting and sealing .....	76
9.5.6	Anchoring .....	77
9.6	Erection and work at site .....	77
9.6.1	Erection drawings .....	77
9.6.2	Marking .....	78
9.6.3	Handling and storage on site .....	78
9.6.4	Trial erection .....	79

<b>9.6.5</b>	<b>Erection methods .....</b>	<b>79</b>
<b>10</b>	<b>Surface treatment .....</b>	<b>80</b>
<b>10.1</b>	<b>General .....</b>	<b>80</b>
<b>10.2</b>	<b>Preparation of steel <math>\text{A}_1</math> substrates for paints and related products <math>\text{A}_1</math>.....</b>	<b>81</b>
<b>10.3</b>	<b>Weather resistant steels .....</b>	<b>82</b>
<b>10.4</b>	<b>Galvanic coupling.....</b>	<b>82</b>
<b>10.5</b>	<b>Galvanizing .....</b>	<b>82</b>
<b>10.6</b>	<b>Sealing of spaces .....</b>	<b>82</b>
<b>10.7</b>	<b>Surfaces in contact with concrete .....</b>	<b>83</b>
<b>10.8</b>	<b>Inaccessible surfaces .....</b>	<b>83</b>
<b>10.9</b>	<b>Repairs after cutting or welding .....</b>	<b>83</b>
<b>10.10</b>	<b>Cleaning after erection.....</b>	<b>83</b>
<b>10.10.1</b>	<b>Cleaning of thin gauge components .....</b>	<b>83</b>
<b>10.10.2</b>	<b>Cleaning of stainless steels components.....</b>	<b>83</b>
<b>11</b>	<b>Geometrical tolerances .....</b>	<b>84</b>
<b>11.1</b>	<b>Tolerance types .....</b>	<b>84</b>
<b>11.2</b>	<b>Essential tolerances .....</b>	<b>84</b>
<b>11.2.1</b>	<b>General .....</b>	<b>84</b>
<b>11.2.2</b>	<b>Manufacturing tolerances .....</b>	<b>84</b>
<b>11.2.3</b>	<b>Erection tolerances .....</b>	<b>85</b>
<b>11.3</b>	<b>Functional tolerances .....</b>	<b>86</b>
<b>11.3.1</b>	<b>General .....</b>	<b>86</b>
<b>11.3.2</b>	<b>Tabulated values .....</b>	<b>86</b>
<b>11.3.3</b>	<b>Alternative criteria .....</b>	<b>87</b>
<b>12</b>	<b>Inspection, testing and correction .....</b>	<b>87</b>
<b>12.1</b>	<b>General .....</b>	<b>87</b>
<b>12.2</b>	<b>Constituent products and components .....</b>	<b>87</b>
<b>12.2.1</b>	<b>Constituent products .....</b>	<b>87</b>
<b>12.2.2</b>	<b>Components .....</b>	<b>88</b>
<b>12.2.3</b>	<b>Non conforming products .....</b>	<b>88</b>
<b>12.3</b>	<b>Manufacturing: geometrical dimensions of manufactured components .....</b>	<b>88</b>
<b>12.4</b>	<b>Welding .....</b>	<b>89</b>
<b>12.4.1</b>	<b>Inspection before and during welding .....</b>	<b>89</b>
<b>12.4.2</b>	<b>Inspection after welding .....</b>	<b>89</b>
<b>12.4.3</b>	<b>Inspection and testing of welded shear studs for composite steel and concrete structures .....</b>	<b>92</b>
<b>12.4.4</b>	<b>Production tests on welding .....</b>	<b>92</b>
<b>12.5</b>	<b>Mechanical fastening .....</b>	<b>93</b>
<b>12.5.1</b>	<b>Inspection of non-preloaded bolted connections .....</b>	<b>93</b>
<b>12.5.2</b>	<b>Inspection and testing of preloaded bolted connections .....</b>	<b>93</b>
<b>12.5.3</b>	<b>Inspection, testing and repairs of hot rivets .....</b>	<b>96</b>
<b>12.5.4</b>	<b>Inspection of cold formed components and sheeting fastening .....</b>	<b>97</b>
<b>12.5.5</b>	<b>Special fasteners and fastening methods .....</b>	<b>97</b>
<b>12.6</b>	<b>Surface treatment and corrosion protection .....</b>	<b>98</b>
<b>12.7</b>	<b>Erection .....</b>	<b>98</b>
<b>12.7.1</b>	<b>Inspection of trial erection .....</b>	<b>98</b>
<b>12.7.2</b>	<b>Inspection of the erected structure .....</b>	<b>98</b>
<b>12.7.3</b>	<b>Survey of geometrical position of connection nodes .....</b>	<b>98</b>
<b>12.7.4</b>	<b>Other acceptance tests .....</b>	<b>100</b>
<b>Annex A</b>	<b>(normative) Additional information, list of options and requirements related to the execution classes .....</b>	<b>101</b>
<b>A.1</b>	<b>List of required additional information .....</b>	<b>101</b>
<b>A.2</b>	<b>List of options .....</b>	<b>104</b>
<b>A.3</b>	<b>Requirements related to the execution classes .....</b>	<b>108</b>
<b>Annex B</b>	<b>(informative) Guidance for the determination of execution classes .....</b>	<b>112</b>
<b>B.1</b>	<b>Introduction .....</b>	<b>112</b>
<b>B.2</b>	<b>Governing factors for choice of execution class .....</b>	<b>112</b>
<b>B.2.1</b>	<b>Consequence classes .....</b>	<b>112</b>

B.2.2 Hazards connected with execution and use of the structure .....	112
B.3 Determination of execution classes .....	113
<b>Annex C (informative) Check-list for the content of a quality plan .....</b>	<b>115</b>
C.1 Introduction.....	115
C.2 Content .....	115
C.2.1 Management.....	115
C.2.2 Specification review .....	115
C.2.3 Documentation.....	115
C.2.4 Inspection and testing procedures.....	116
<b>Annex D (normative) Geometrical tolerances .....</b>	<b>117</b>
D.1 Essential tolerances .....	117
D.1.1 Essential manufacturing tolerances – Welded profiles .....	118
D.1.2 Essential manufacturing tolerances – Press braked cold formed profiles .....	119
D.1.3 Essential manufacturing tolerances – Flanges of welded profiles .....	120
D.1.4 Essential manufacturing tolerances – Flanges of welded box sections .....	121
D.1.5 Essential manufacturing tolerances – Web stiffeners of profiles or box sections.....	123
D.1.6 Essential manufacturing tolerances – Stiffened plating .....	125
D.1.7 Essential manufacturing tolerances – Cold formed profiled sheets.....	126
D.1.8 Essential manufacturing tolerances – Fastener holes, notches and cut edges .....	127
D.1.9 Essential manufacturing tolerances – Cylindrical and conical shells .....	128
D.1.10 Essential manufacturing tolerances – Lattice components.....	129
D.1.11 Essential erection tolerances – <b>A1</b> Columns of single storey buildings <b>A1</b> .....	130
D.1.12 Essential erection tolerances – Multi-storey columns .....	131
D.1.13 Essential erection tolerances – Full contact end bearing .....	133
D.1.14 Essential erection tolerances – Towers and masts.....	133
D.1.15 Essential erection tolerances – Beams subject to bending and components subject to compression .....	134
D.2 Functional tolerances.....	135
D.2.1 Functional manufacturing tolerances – Welded profiles .....	136
D.2.2 Functional manufacturing tolerances – Press braked cold formed profiles .....	137
D.2.3 Functional manufacturing tolerances – Flanges of welded profiles .....	138
D.2.4 Functional manufacturing tolerances – Welded box sections .....	139
D.2.5 Functional manufacturing tolerances – Webs of welded profiles or box sections .....	141
D.2.6 Functional manufacturing tolerances – Web stiffeners of welded profiles or box sections .....	142
D.2.7 Functional manufacturing tolerances – Components .....	143
D.2.8 Functional manufacturing tolerances – Fastener holes, notches and cut edges.....	144
D.2.9 Functional manufacturing tolerances – Column splices and baseplates .....	146
D.2.10 Functional manufacturing tolerances – Lattice components .....	147
D.2.11 Functional manufacturing tolerances – Stiffened plating .....	148
D.2.12 Functional manufacturing tolerances – Towers and masts .....	150
D.2.13 Functional manufacturing tolerances – Cold formed profiled sheets .....	151
D.2.14 Functional manufacturing tolerances – Bridge decks.....	151
D.2.15 Functional erection tolerances – Bridges .....	153
D.2.16 Functional erection tolerances – Bridge decks (sheet 1/3).....	153
D.2.17 Functional erection tolerances – Bridge decks(sheet 2/3).....	154
D.2.18 Functional erection tolerances – Bridges decks (sheet 3/3).....	156
D.2.19 Functional manufacturing and erection tolerances – Crane beams and rails .....	157
D.2.20 Functional tolerances – Concrete foundations and supports .....	158
D.2.21 Functional erection tolerances – Crane runways .....	160
D.2.22 Functional erection tolerances – Positions of columns.....	161
D.2.23 Functional erection tolerances – <b>A1</b> Columns of single storey buildings <b>A1</b> .....	162
D.2.24 Functional erection tolerances – Multi-storey columns .....	163
D.2.25 Functional erection tolerances – Buildings .....	164
D.2.26 Functional erection tolerances – Beams in buildings .....	166
D.2.27 Functional erection tolerances - Roof sheeting designed as a stressed-skin.....	167
D.2.28 Functional erection tolerances - Profiled steel sheeting.....	167
<b>Annex E (informative) Welded joints in hollow sections .....</b>	<b>168</b>
E.1 General.....	168

<b>E.2</b>	<b>Guidance for start and stop positions .....</b>	<b>168</b>
<b>E.3</b>	<b>Preparation of joint faces .....</b>	<b>168</b>
<b>E.4</b>	<b>Assembly for welding .....</b>	<b>169</b>
<b>E.5</b>	<b>Fillet welded joints .....</b>	<b>177</b>
<b>Annex F (normative) Corrosion protection .....</b>	<b>178</b>	
<b>F.1</b>	<b>General .....</b>	<b>178</b>
<b>F.1.1</b>	<b>Field of application.....</b>	<b>178</b>
<b>F.1.2</b>	<b>Performance specification .....</b>	<b>178</b>
<b>F.1.3</b>	<b>Prescriptive requirements .....</b>	<b>178</b>
<b>F.1.4</b>	<b>Work method.....</b>	<b>179</b>
<b>F.2</b>	<b>Surface preparation of carbon steels.....</b>	<b>179</b>
<b>F.2.1</b>	<b>Surface preparation of carbon steels prior to painting and metal spraying .....</b>	<b>179</b>
<b>F.2.2</b>	<b>Surface preparation of carbon steels prior to galvanizing .....</b>	<b>180</b>
<b>F.3</b>	<b>Welds and surfaces for welding .....</b>	<b>180</b>
<b>F.4</b>	<b>Surfaces in preloaded connections.....</b>	<b>180</b>
<b>F.5</b>	<b>Preparation of fasteners .....</b>	<b>180</b>
<b>F.6</b>	<b>Coating methods .....</b>	<b>181</b>
<b>F.6.1</b>	<b>Painting .....</b>	<b>181</b>
<b>F.6.2</b>	<b>Metal spraying .....</b>	<b>181</b>
<b>F.6.3</b>	<b>Galvanizing .....</b>	<b>182</b>
<b>F.7</b>	<b>Inspection and checking.....</b>	<b>182</b>
<b>F.7.1</b>	<b>General .....</b>	<b>182</b>
<b>F.7.2</b>	<b>Routine checking.....</b>	<b>182</b>
<b>F.7.3</b>	<b>Reference areas.....</b>	<b>182</b>
<b>F.7.4</b>	<b>Galvanized components .....</b>	<b>182</b>
<b>Annex G (normative) Test to determine slip factor .....</b>	<b>184</b>	
<b>G.1</b>	<b>General .....</b>	<b>184</b>
<b>G.2</b>	<b>Significant variables.....</b>	<b>184</b>
<b>G.3</b>	<b>Test specimens.....</b>	<b>184</b>
<b>G.4</b>	<b>Slip test procedure and evaluation of results.....</b>	<b>186</b>
<b>G.5</b>	<b>Extended creep test procedure and evaluation.....</b>	<b>186</b>
<b>G.6</b>	<b>Test results .....</b>	<b>187</b>
<b>Annex H (normative) <sup>A1</sup> Calibration test for preloaded bolts under site conditions <sup>A1</sup> .....</b>	<b>189</b>	
<b>H.1</b>	<b>Scope .....</b>	<b>189</b>
<b>H.2</b>	<b>Symbols and units.....</b>	<b>189</b>
<b>H.3</b>	<b>Principle of the test .....</b>	<b>189</b>
<b>H.4</b>	<b>Test apparatus .....</b>	<b>190</b>
<b>H.5</b>	<b>Test assemblies .....</b>	<b>190</b>
<b>H.6</b>	<b>Test set up.....</b>	<b>190</b>
<b>H.7</b>	<b>Test procedure.....</b>	<b>191</b>
<b>H.8</b>	<b>Evaluation of test results.....</b>	<b>192</b>
<b>H.9</b>	<b>Test report.....</b>	<b>193</b>
<b>Annex J (normative) Use of compressible washer-type direct tension indicators.....</b>	<b>194</b>	
<b>J.1</b>	<b>General .....</b>	<b>194</b>
<b>J.2</b>	<b>Fitting.....</b>	<b>194</b>
<b>J.3</b>	<b>Checking .....</b>	<b>196</b>
<b>Annex K (informative) Hexagon injection bolts .....</b>	<b>199</b>	
<b>K.1</b>	<b>General .....</b>	<b>199</b>
<b>K.2</b>	<b>Hole sizes .....</b>	<b>199</b>
<b>K.3</b>	<b>Bolts.....</b>	<b>199</b>
<b>K.4</b>	<b>Washers.....</b>	<b>200</b>
<b>K.5</b>	<b>Nuts.....</b>	<b>201</b>
<b>K.6</b>	<b>Resin .....</b>	<b>201</b>
<b>K.7</b>	<b>Tightening .....</b>	<b>201</b>
<b>K.8</b>	<b>Installation.....</b>	<b>201</b>
<b>Annex L (informative) Guide to flow diagram for development and use of a WPS.....</b>	<b>203</b>	

iTeh STANDARD PREVIEW  
(standards.iteh.ai)

## EN 1090-2:2008+A1:2011 (E)

Annex M (normative) Sequential method for fasteners inspection .....	204
M.1 General.....	204
M.2 Application .....	205
Bibliography .....	207

**iTeh STANDARD PREVIEW  
(standards.iteh.ai)**

SIST EN 1090-2:2008+A1:2012  
<https://standards.iteh.ai/catalog/standards/sist/fc26e6c2-bbf4-4c98-9e43-592d82bf551a/sist-en-1090-2-2008a1-2012>

## Foreword

This document (EN 1090-2:2008+A1:2011) has been prepared by Technical Committee CEN/TC 135 "Execution of steel structures and aluminium structures", the secretariat of which is held by SN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2012, and conflicting national standards shall be withdrawn at the latest by February 2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document includes Amendment 1, approved by CEN on 2011-06-25.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A<sub>1</sub>** **A<sub>1</sub>**.

This document supersedes **A<sub>1</sub>** EN 1090-2:2008 **A<sub>1</sub>**.

EN 1090, *Execution of steel structures and aluminium structures* consists of the following parts:

*Part 1: Requirements for conformity assessment of structural components*

**STANDARD REVIEW**

*Part 2: Technical requirements for steel structures*

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*Part 3: Technical requirements for aluminium structures*

**SIST EN 1090-2:2008+A1:2012**

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

**EN 1090-2:2008+A1:2011 (E)****Introduction**

This European Standard specifies requirements for execution of steel structures, in order to ensure adequate levels of mechanical resistance and stability, serviceability and durability.

This European Standard specifies requirements for execution of steel structures in particular those that are designed according to all parts of EN 1993 and the steel parts of composite steel and concrete structures designed according to all parts of EN 1994.

This European Standard presupposes that the work is carried out with the necessary skill and adequate equipment and resources to perform the work in accordance with the execution specification and the requirements of this European Standard.

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## 1 Scope

This European Standard specifies requirements for execution of structural steelwork as structures or as manufactured components, produced from:

- hot rolled, structural steel products up to and including grade S690;
- cold formed components and sheeting up to and including grades S700 ~~(A1) deleted text (A1)~~;
- hot finished and cold formed austenitic, austenitic-ferritic and ferritic stainless steel products;
- hot finished and cold formed structural hollow sections, including standard range and custom-made rolled products and hollow sections manufactured by welding.

This European Standard may also be used for structural steel grades up to and including S960, provided that conditions for execution are verified against reliability criteria and any necessary additional requirements are specified.

This European Standard specifies requirements independent of the type and shape of the steel structure (e.g. buildings, bridges, plated or latticed components) including structures subjected to fatigue or seismic actions. The requirements are expressed in terms of execution classes

This European Standard applies to structures designed according to the relevant part of EN 1993.

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This European Standard applies to structural components and sheeting as defined in EN 1993-1-3.

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This European Standard applies to steel components in composite steel and concrete structures designed according to the relevant part of EN 1994.

[SIST EN 1090-2:2008+A1:2012](#)

This European Standard may be used for structures designed according to other design rules provided that conditions for execution comply with them and any necessary additional requirements are specified.

This European Standard does not cover requirements for watertightness or air permeability resistance of sheeting.

## 2 Normative references

### 2.1 General

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

### 2.2 Constituent products

#### 2.2.1 Steels

EN 10017, *Steel rod for drawing and/or cold rolling — Dimensions and tolerances*

EN 10021, *General technical delivery conditions for steel products*

EN 10024, *Hot rolled taper flange I sections — Tolerances on shape and dimensions*

EN 10025-1:2004, *Hot rolled products of structural steels — Part 1: General technical delivery conditions*

EN 10025-2, *Hot rolled products of structural steels — Part 2: Technical delivery conditions for non-alloy structural steels*

EN 10025-3, *Hot rolled products of structural steels — Part 3: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels*  
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EN 10025-4, *Hot rolled products of structural steels — Part 4: Technical delivery conditions for thermomechanical rolled weldable fine grain structural steels*  
SIST EN 1090-2:2008+A1:2012

<https://standards.iteh.ai/catalog/standards/sist/fc26e6c2-bbf4-4c98-9e43>

EN 10025-5, *Hot rolled products of structural steels — Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance*

EN 10025-6, *Hot rolled products of structural steels — Part 6: Technical delivery conditions for flat products of high yield strength structural steels in the quenched and tempered condition*

EN 10029, *Hot rolled steel plates 3 mm thick or above — A1 Tolerances on dimensions and shape A1*

EN 10034, *Structural steel I and H sections — Tolerances on shape and dimensions*

EN 10048, *Hot rolled narrow steel strip — Tolerances on dimensions and shape*

EN 10051, A1 *Continuously hot-rolled strip and plate/sheet cut from wide strip of non-alloy and alloy steels A1 — Tolerances on dimensions and shape*

EN 10055, *Hot rolled steel equal flange tees with radiused root and toes — Dimensions and tolerances on shape and dimensions*

EN 10056-1, *Structural steel equal and unequal leg angles — Part 1: Dimensions*

EN 10056-2, *Structural steel equal and unequal leg angles — Part 2: Tolerances on shape and dimensions*

EN 10058, *Hot rolled flat steel bars for general purpose — Dimensions and tolerances on shape and dimensions*

EN 10059, *Hot rolled square steel bars for general purposes — Dimensions and tolerances on shape and dimensions*

EN 10060, *Hot rolled round steel bars for general purposes — Dimensions and tolerances on shape and dimensions*

EN 10061, *Hot rolled hexagon steel bars for general purposes — Dimensions and tolerances on shape and dimensions*

EN 10080, *Steel for the reinforcement of concrete — Weldable reinforcing steel — General*

EN 10088-1, *Stainless steels — Part 1: List of stainless steels*

EN 10088-2:2005, *Stainless steels — Part 2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes*

EN 10088-3:2005, *Stainless steels — Part 3: Technical delivery conditions for semi-finished products, bars, rods, wire, sections and bright products of corrosion resisting steels for general purposes*

EN 10131, *Cold rolled uncoated and zinc or zinc-nickel electrolytically coated low carbon and high yield strength steel flat products for cold forming — Tolerances on dimensions and shape*

EN 10139, *Cold rolled uncoated mild steel narrow strip for cold forming — Technical delivery conditions*

EN 10140, *Cold rolled narrow steel strip — Tolerances on dimensions and shape*

EN 10143, *Continuously hot-dip coated steel sheet and strip — Tolerances on dimensions and shape*

EN 10149-1, *Hot-rolled flat products made of high yield strength steels for cold forming — Part 1: General delivery conditions*

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EN 10149-2, *Hot-rolled flat products made of high yield strength steels for cold forming — Part 2: Delivery conditions for thermomechanically rolled steels*

SIST EN 1090-2:2008+A1:2012

EN 10149-3, *Hot-rolled flat products made of high yield strength steels for cold forming — Part 3: Delivery conditions for normalized or normalized rolled steels*

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EN 10160, *Ultrasonic testing of steel flat product of thickness equal or greater than 6 mm (reflection method)*

EN 10163-2, *Delivery requirements for surface condition of hot-rolled steel plates, wide flats and sections — Part 2: Plate and wide flats*

EN 10163-3, *Delivery requirements for surface condition of hot-rolled steel plates, wide flats and sections — Part 3: Sections*

EN 10164, *Steel products with improved deformation properties perpendicular to the surface of the product — Technical delivery conditions*

A1 EN 10169, *Continuously organic coated (coil coated) steel flat products — Technical delivery conditions* A1

EN 10204, *Metallic products — Types of inspection documents*

EN 10210-1, *Hot finished structural hollow sections of non-alloy and fine grain steels — Part 1: Technical delivery conditions*

EN 10210-2, *Hot finished structural hollow sections of non-alloy and fine grain steels — Part 2: Tolerances, dimension and sectional properties*

EN 10219-1, *Cold formed welded structural hollow sections of non-alloy and fine grain steels — Part 1: Technical delivery conditions*