

# ISC590W – IS 513 Part 2 (2016) – Weathering HSLA- Technical Datasheet

## 1. Chemical & Mechanical Properties

Property	Value
C (%)	≤0.12
Mn (%)	≤1.60
Si (%)	≤0.50
P (%)	≤0.030
S (%)	≤0.030
Al (%)	0.02–0.06
Ti (%)	≤0.15
Nb (%)	≤0.09
Cu (%)	0.25–0.40
Cr (%)	0.40–0.80
Yield Strength YS (MPa min)	590
Tensile Strength UTS (MPa min)	650
Elongation A80 (%) min	22

## 2. Equivalent / Alternative Grades

Grade	Standard	C%	Mn %	Si %	P%	S%	Al %	Ti %	Nb %	Cu %	Cr %	UTS/YS
ASTM Gr 590	ASTM A1008	≤0.12	≤1.60	≤0.50	≤0.030	≤0.030	0.02–0.06	≤0.15	≤0.09	0.25–0.40	0.40–0.80	YS 590 / UTS 650
EN Gr 590	EN 10268	≤0.12	≤1.60	≤0.50	≤0.030	≤0.030	0.02–0.06	≤0.15	≤0.09	0.25–0.40	0.40–0.80	YS 590 / UTS 670
JFS Gr 590	JFS A2001	≤0.12	≤1.60	≤0.50	≤0.030	≤0.030	0.02–0.06	≤0.15	≤0.09	0.25–0.40	0.40–0.80	YS 590 / UTS 680

## 3. Common Applications

- Automotive structural parts
- High-strength formed panels

- Chassis components

#### 4. Standard Conformance

Cold-reduced sheet/strip conforming to IS 513 Part 2 (2016).

#### 5. Disclaimer

All chemical compositions, mechanical properties, dimensions and other technical data presented on this page are provided by Raunaq Steels Trading Pvt. Ltd. for **general reference only**. While we endeavour to ensure that the information is as accurate and up-to-date as possible, **no warranty, express or implied, is given** as to its completeness, correctness or fitness for any particular purpose. Raunaq Steels Trading Pvt. Ltd. **accepts no liability** for any loss or damage arising directly or indirectly from the use of, or reliance upon, the information contained herein. For **authoritative and legally binding** specifications, users must refer to the **official publications** of the relevant standards—such as the BIS, ASTM, EN or JIS standards—available through their respective websites or published documents