# Specifications & Grades

## Specifications of Hot Dipped Galvanized Steel

Hot Dipped Galvanized Steel Sheet	Galvanized steel sheet (Regular Spangle)	Nominal thickness	0.23-0.6mm	Nominal width	800-1250mm
		Nominal thickness	0.7-2.0mm	Nominal width	800-1500mm
		Nominal thickness	2.3-3.5mm (hot rolled galvanized sheet)	Nominal width	800-1250mm
	Galvanized steel sheet (Zero Spangle)	Nominal thickness	0.35-2.0mm	Nominal width	1000- 1500mm
	Galvanized steel sheet used for pre- painting	Nominal thickness	0.25-0.8mm	Nominal width	800-1250mm
Hot Dipped Galvanized Steel Coil	Inner diameter	508mm or 610mm			
	Galvanized steel coil weight	4-6 tonnes (thickness ≤1.2mm),5-8 tonnes (thickness >1.2mm),or customizable			
	Regular spangle (SR)		Thickness:0.25-1.20mm (commercial quality CQ/drawing quality DQ)		
Zinc Coating (Spangle)			Thickness:1.2-3.5mm (structural quality SQ)		
	Spangle-free (F)		Thickness:0.35-2.00mm		
Surface Treatment	Chromium passivation (C)		Thickness:0.25-3.5mm		
	Chromium passivation + oiling (CO)		Thickness:0.7-3.50mm		
	Trivalent chromium passivation (C3)		Thickness:0.25-3.50mm		
	Trivalent chromium passivation + oiling (CO3)		Thickness: 0.7-3.50mm		
	Chrome-free passivation (C5)		Thickness:0.25-3.50mm		
	Anti-fingerprint film (AF)		Thickness:0.35-2.00mm (Zero Spangle)		

#### Tolerances of Dimensions

Width Tolerance	Nominal Width	Normal Accuracy PW.A	Advanced Accuracy PW.B	
	≤1200	0-5	0-2	
	>1200-1250	0-6	0-2	
Thickness Tolerance	We deliver standard products with negative tolerance to ensure quality and consistency. For any special requirements, customers should specify their needs when placing an order to guarantee customized adjustments.			
	Our thickness tolerance of ±0.03mm offers better precision than national standards. However, for some coils, slight deviations may occur within the first or last 30 meters due to standard industry practices.			

## Grades of Hot Dipped Galvanized Steel

European Standard	Japanese Standard	Usage
DC51D+Z DC51D+AZ DC51D+ZA	SGCC SZACC SGLCC	Galvanized steel for general use
DC52D+Z DC52D+AZ DC52D+ZA	SGCD1 SZACD1 SGLCD1	Galvanized steel for drawing
\$280GD+Z \$280GD+AZ \$280GD+ZA	SGC340 SZAC340 SGLC340	Galvanized steel for structural purpose
\$350GD+Z \$350GD+AZ \$350GD+ZA	SGC400 SZAC400 SGLC400	Galvanized steel for structural purpose

# **Mechanical Properties**

## Hot Dipped Galvanized Steel Compliant with National / European Standards

Grade	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A80 (%)	
TDC51D+Z,TDC51D+ZA	-	270-500	≥20	
TDC52D+Z,TDC52D+ZA	140-300	270-420	≥24	
TS220GD+Z,TS220GD+ZA	≥220	≥300	≥20	
TS250GD+Z,TS250GD+ZA	≥250	≥330	≥17	
TS280GD+Z,TS280GD+ZA	≥280	≥360	≥16	
T\$320GD+Z,T\$320GD+ZA	≥320	≥390	≥15	

#### Hot Dipped Galvanized Steel Compliant with Japanese Standard

Grade Yield Strength (MPa)		Tensile Strength (MPa)	Elongation A50 (%)  Nominal thickness (mm)			
	Yield Strength (MPa)					
		0.25-<0.40	040- <0.60	0.60-<1.00	≥1.00	
sgcc		≥270	≥28	≥31	≥34	≥36
SGCD	≤240	≥270	≥30	≥34	≥36	≥37
GC340	≥245	≥340	≥20	≥20	≥20	≥20
SGC400	≥295	≥400	≥18	≥18	≥18	≥18

#### Notes:

- a. Testing follows strict procedures based on applicable industry standards.
  b. With prolonged storage, steel sheets and coils may experience changes in their mechanical properties. This can affect formability, leading to issues such as increased hardness and reduced flexibility. To maintain the best performance, we recommend using the materials promptly after purchase.