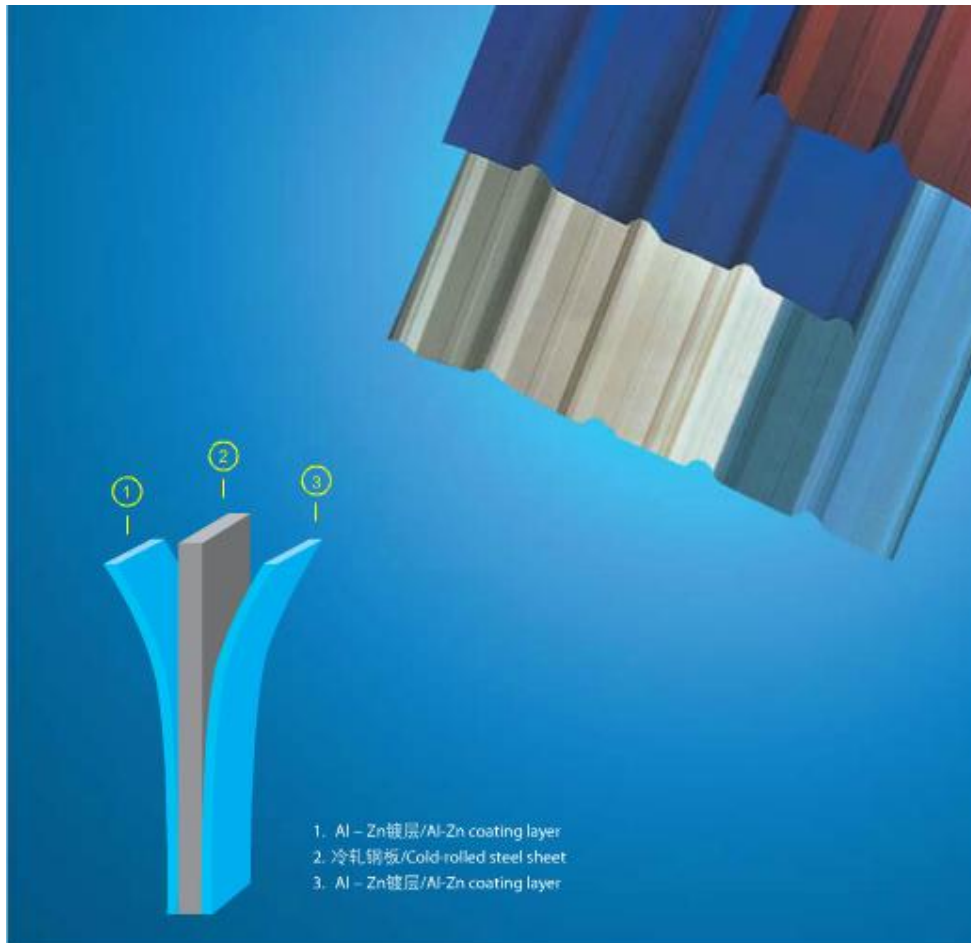


Definition of the hot-dip Al-Zn coated steel sheet

The hot dip galvalume steel is a kind of coated steel. With the cold rolled steel of different strength and thickness as substrate, it is produced through applying Al-Zn coat on both faces by hot dip process. In its coating, Al accounts for about 55%, Si of 1.6% and Zn of 43.4%. It enjoys both the physical protective feature and durability of Al and the electrochemical protective property of Zn. And its surface has bright silver color and regular embossed-like figure, which are highly decorative.

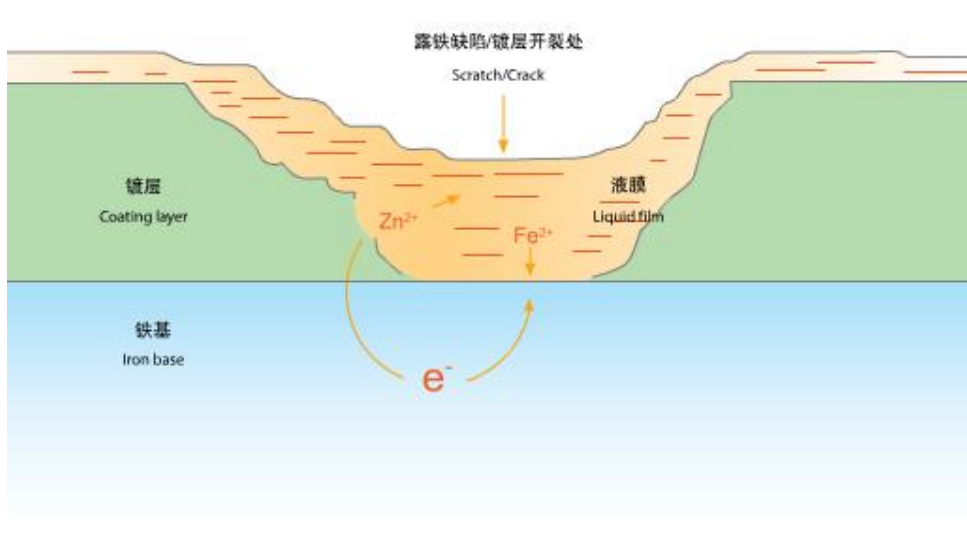




Characteristics of the hot-dip Al-Zn coated steel sheet

项目 Item	热镀锌 GI	热镀锌铝（5%铝） GF(Zn-5%Al)	热镀铝锌（55%铝） GALVALUME（55%Al-45%Zn）	铝 Al
使用寿命 Service Life	一般 Fair	一般 Fair	好 Good	好 Good
牺牲阳极保护 Electrochemical Protection	好 Good	好 Good	好 Good	无 N/A
焊接性能 Welding Performance	好 Good	一般 Fair	差 Poor	差 Poor
与潮湿混凝土适用性 Application with wet concrete	好 Good	差 Poor	很差 Very poor	很差 Very poor
耐高温 Thermal resistance	差 Poor	差 Poor	好 Good	很好 Excellent





The Al-Zn coated layer has a good electrochemical protection to the steel sheet



Resistance to corrosion

Al-Zn coated steel sheet has better performance in corrosion resistance than GI sheet of the same thickness and its service life is 1-5times longer than general GI sheet.

Salt spray test

				
试验时间 Test duration	240 小时/hours	1200 小时/hours	240 小时/hours	1200 小时/hours
镀层种类及重量 Type & weight of coating	GI, (镀锌/Zn coated) 90/90g/m ²		GL, (镀铝锌/Al-Zn coated) 75/75g/m ²	
试验标准 Standard of test	ASTM B117			

Machinability

It can satisfy the processing requirements of rolling, coiling and others processes alike.

Thermal resistance

Common HDG steel plate normally works under 230°C, and has its color changed at 250°C, however, Galvalume steel sheet can sustain the environment at 315°C for long time.

High reflectivity

Reflection ability of heat and light is twice as much as those of hot dip galvanized steel sheet, and its reflectivity is more than 0.75, exceeding 0.65(required by the EPA Energy Star Standard), which is an ideal construction materials of saving energy.

Precautions while using

The Galvalume steel sheet should be kept away from the alkaline medium.

The roof made out of the Galvalume steel requires a slope to help drainage and to alleviate corrosion.

The Galvalume steel sheet should have no direct contact with foundation concrete, wet wood, copper, lead and graphite.

Use trimmed plate rather than the plate to be cut plate at jobsite.

While the steel sheet is piled and processed, its finger-print proof film should be protected from getting black due to dampness and high temperature.

If the Galvalume steel is used for foaming and bonding application, then, small-lot test is needed for the initial use, in order to prevent the poor bonding.

Application of hot dip Al-Zn coated steel sheet

Architecture

Roofs and outside walls of civilian and industrial buildings, garage doors, fencings and window blinds



Appliances industry

Outer clad sheets for washing machine, refrigerator, television, air conditioners and ventilation system, explosion-proof strip, solar water heater and appliance parts.