SINCE 1955
ROVAL
ROVAL Corporation

20 year exposure test result in a general environment

[Objective]
Verify the anti-corrosion performance of ROVAL and Hot-Dip Galvanizing by an atmospheric exposure.

Ref. Test station

[Duration]
From: July 15th 2002, Reported: July 15th 2022

[Method]
In accordance with "JIS Z 2381(2001)
"General requirements for atmospheric exposure test"
Condition: Direct exposure with south face 30-degree.

[Test Piece]

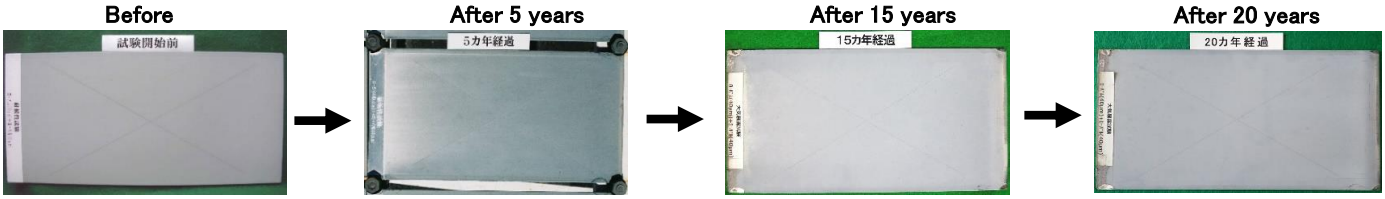
Name	Size	Type of steel
Structural rolled steel （Middle grade sand-blasted）	300*150*1.6	JIS G 3101 (SS-400)
Hot-dip galvanized plate （JIS H 8641 HDZ55）	300*150*3.2	JIS G 3101 (SS-400)

[Location]
Japan Paint Inspection and Testing Association(JPIA) West Branch

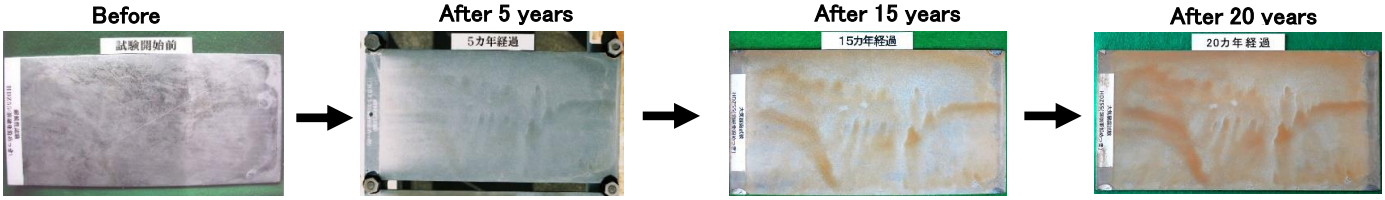
[Evaluation Method]
Evaluation by visual observation

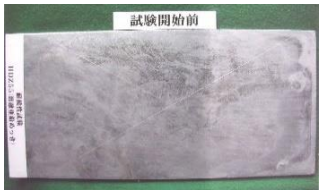
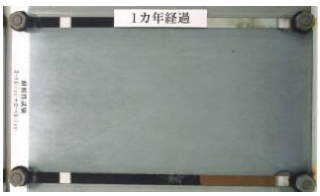
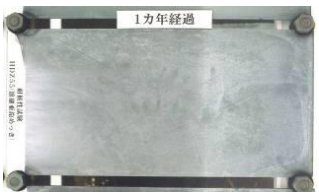
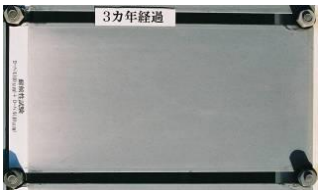
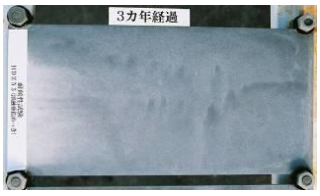
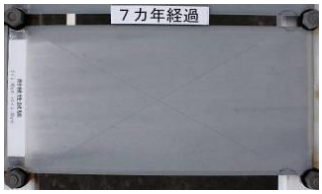
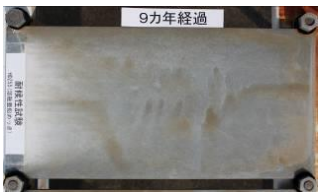
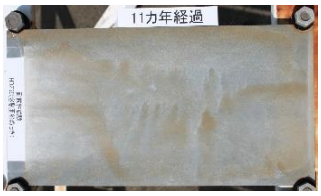
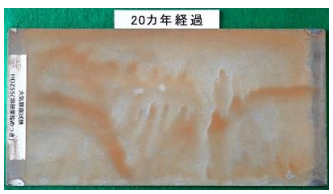
[Result]
Evaluation after 20-year atmospheric exposure

ROVAL（Film thickness: 80μm）
Color change of the film was seen but stayed without rust for 20 years.



Hot-Dip Galvanizing (HDZ55)
Rust occurred on gray zone, which is probably due to corrosion of ferrous of zinc-ferrous alloy layer.
However, the rust was only on its surface and not heavy.



	ROVAL	Hot-Dip Galvanizing（HDZ55）
Before exposure		
1 year		
3 years		
5 years		
7 years		
9 years		
11 years		
15 years		
20 years		

*Bightness of the pictures are different.