



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
OFFICE OF THE SECRETARY
Bonifacio Drive, Port Area Manila



097.13 DPWH

02.20.2025

FEB 19 2025

DEPARTMENT ORDER)

**SUBJECT: DPWH Standard Specification for
Item 659 – Tunnel Steel Door**

NO. 38)

Series of 2025)

on 2/20/2025

To support the Department's commitment in updating its standard specifications and adopting effective/appropriate solutions for specific project needs, the attached Standard Specification for **Item 659 – Tunnel Steel Door** is hereby prescribed for adoption in DPWH infrastructure projects that require the utilization of such on the Program of Works.

The Standard Specification shall form part of the DPWH Standard Specifications for Highways, Bridges and Airports, Volume II. Likewise, the new Pay Item is now included in the Standard Pay Item List and in the Project and Contract Management Application (PCMA).

This Order shall take effect immediately.


MANUEL M. BONOAN
Secretary

Department of Public Works and Highways
Office of the Secretary



Encl: DPWH Standard Specification for Item 659 – Tunnel Steel Door

14.1 JDV/AGC

DPWH Standard Specification for Item 659 – TUNNEL STEEL DOOR

659.1 Description

This item shall consist of fabricating, furnishing, installing and commissioning of steel doors and frames equipped with fixing accessories and locking devices in accordance to this Specification and in conformance to the requirements as shown on the Plans.

Steel door shall be installed at the cross-passages connecting the tunnels and shall be capable of remote operation from the control center and manual operation on site in case of emergency inside the tunnel.

659.2 Material Requirements

659.2.1 Steel Door

Stainless Steel 304 shall be applied as the primary material for steel doors.

Stainless steel door shall be rigid and equivalent to or better than SUS304 of JIS G 4303, have enough strength and be easily opened at static pressure difference between front and back side of door. Stainless steel doors shall automatically close after a certain time.

659.2.2 Electrical Equipment and Appurtenances

All electrical equipment and appurtenances to be used for the system shall be in conformity with the Philippine Electrical Code (PEC), Part 1 and bearing the Philippine Standard (PS) mark for locally manufactured and Import Commodity Clearance (ICC) certification marks duly issued by Bureau of Philippine Standards (BPS) for imported materials.

Power supply shall be provided by the Contractor at the pull box installed inside the machine room and shall furnish and install the overcurrent protective device with suitable ratings and capacities, conduits, wirings, fittings, and all other equipment and electrical connections needed to complete the electrical installation of the system.

659.3 Construction Requirements

659.3.1 Submittals

The Contractor shall submit shop drawings and manufacturers data which includes but not limited to brochures, maintenance manual, manufacturer's certificate, and samples of materials for the approval of the Engineer prior to fabrication, furnishing, installation and commissioning of the steel doors.

659.3.2 Installation

Each steel door shall be installed in accordance with the written instruction of the manufacturer and under the direct supervision of the manufacturer's representative and the Engineer.

659.3.3 Testing and Commissioning

After installation, testing and commissioning shall be conducted by the Contractor at his own expense, with the presence of the Engineer, to make the system operational and accepted in compliance with the requirements of the National Fire Protection Association (NFPA), latest edition of the Philippine Electrical Code, National Safety Code and any other ordinances and equivalent specifications.

All materials, labor and equipment required for the conduct of tests shall be supplied by the Contractor.

659.4 Method of Measurement

The work under this Item shall be measured by lump sum of installed and accepted steel door as indicated on the Plans.

659.5 Basis of Payment

The accepted quantity, measured as prescribed in Section 659.4, Method of Measurement shall be paid for at the Contract Unit Price which price and payment shall be full compensation for furnishing all materials, including all labor, equipment, tools and incidentals necessary to complete the work prescribed in this Item.

Payment shall be made under:

Pay Item Number	Description	Unit of Measurement
659 (1)	Tunnel Steel Door	Lump Sum