

# B GUIDANCE

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## GANGWAYS - A PRACTICAL GUIDE

A GANGWAY REFERS TO A PLATFORM, A WALKWAY OR A RAMP CONNECTING THE SHIP TO LAND OR OTHER VESSELS AND IS USED AS A MEANS OF SAFE ACCESS FOR THE CREW.

The gangway must be properly rigged and maintained to prevent accidents or injuries and to counter the movement from tidal streams, swell, cargo operations and surge movements caused by ships in the vicinity.

## LEGISLATION

ACCOMMODATION LADDERS AND GANGWAYS FITTED ON SHIPS CONSTRUCTED BEFORE OR REPLACED AFTER 1 JANUARY 2010, SHOULD, TO THE EXTENT POSSIBLE, ADHERE WITH THE IMO CIRCULAR MSC.1/CIRC.1331 – IMO **GUIDELINES FOR CONSTRUCTION, INSTALLATION, MAINTENANCE AND INSPECTION OF MEANS OF EMBARKATION AND DISEMBARKATION<sup>1</sup>**.

This circular should be referred to in conjunction with the Safety of Life at Sea (SOLAS) regulation II-1/3-9 (Means of Embarkation on and Disembarkation from Ships).

# ARRANGEMENT

ALWAYS ENSURE THAT EACH ACCOMMODATION LADDER IS LONG ENOUGH.

Even when tilted at its steepest working angle, its lowest platform must stay less than 600mm above the waterline, even when the ship is empty and at its lightest.

Moreover, the arrangement for the gangway should allow direct access between the ladder and the landing at the ship's deck. The platform should be securely guarded by handrails and adequate handholds.

When the gangway overhangs the water in port, a net or suitable protection should be provided to prevent personnel from falling.



# CAUTIONARY NOTICE

THE MAXIMUM AND MINIMUM PERMISSIBLE DESIGNED ANGLES OF INCLINATION, DESIGN AND MAXIMUM LOAD ON THE BOTTOM END PLATE SHOULD BE CLEARLY DISPLAYED ON EACH SIDE OF THE GANGWAY.

Personnel embarking on the gangway should be aware of the maximum number of persons allowed on the gangway at any one time to avoid overloading.

Additionally, if the maximum operational load differs from the design load, this distinction should be noted on the marking plate.



FIGURE 1  
Example of gangway notice



# GANGWAY OPERATIONS

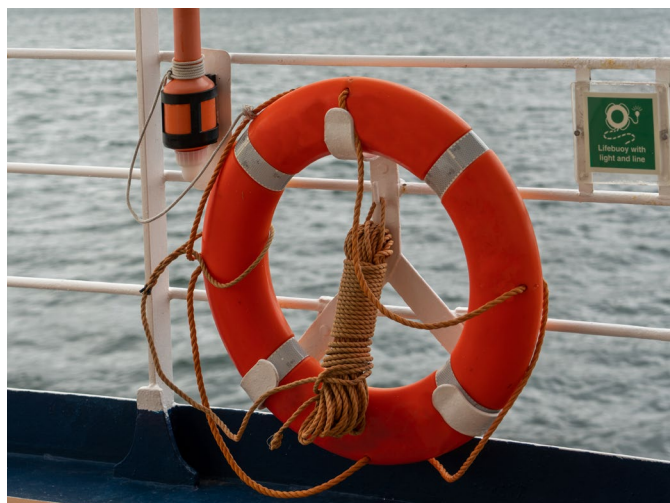
THE SHIP MUST ACTIVELY ENGAGE WITH THE LOCAL AUTHORITIES, AS THEY MAY INTERPRET AND ENFORCE VARYING SAFETY REQUIREMENTS RELATED TO SECURE METHODS OF ACCESS.

Accidents may occur while rigging the gangway, whether during the setup of stanchions or side ropes, especially when the gangway is overhanging the side, and the crew is working at height. Many ships now feature a gangway safety wire to which safety harnesses can be attached to, or they have fall inertia blocks, allowing for greater freedom of movement. Crew members' safety harnesses should have a slightly taut safety line, rather than being fully slack. This slight tension can help prevent crew members from landing abruptly in the event of a fall, reducing the risk of severe injuries.

If the vessel is doing a ship-to-ship (STS) operation, the gangway should not be placed on a bulwark or on the side railing of the vessel, unless these structures are designed to have sufficient strength and can support the weight of the gangway.

As part of the installation process, a lifebuoy equipped with a self-igniting light and a buoyant line should be available for immediate use in the vicinity of the embarkation and disembarkation area.

Furthermore, it can sometimes be difficult when positioning the gangway on the pier, especially when there are bollards or other fixtures on the wharf. In such cases, all kinds of extensions, extra steps, small gangways, or portable walking bridges may be used to connect the gangway with the quay side. If these solutions are required, a risk assessment should be carried out and the solution approved by the master and in some cases, you may obtain class approval.



# GANGWAY SECURITY

TO EFFECTIVELY DETER A STOWAWAY, THE VESSEL SHOULD CONDUCT A THOROUGH RISK ASSESSMENT TO SYSTEMATICALLY ADDRESS ALL THE VULNERABILITIES ON BOARD AND MANAGE THE LIKELIHOOD OF ANY SECURITY THREATS.

Often, the gangway serves as the first line of defense against stowaways boardings and is regarded as the primary deterrent to stowaway incidents.

To implement the Ship Security Plan (SSP) and comply with the International Ship and Port Facility Security (ISPS) Code, ship crew members typically restrict access to the vessel to a single focal point - the gangway. They secure and lock all other unauthorised entry or exit points. The gangway becomes the primary access point, where the crew controls boarding and conducts security checks and routine inspections of baggage before allowing anyone on board.

Stowaways may sometimes attempt to gain access to the vessel by disguising themselves as stevedores walking up the gangway. Therefore, gangway access should be a priority and should be placed under round-the-clock watchful eyes of gangway watchkeepers to check the visitor's photographic identification (ID). The Ship Security Officer (SSO) should verify visitors against the anticipated visitors list. If any unexpected visitors arrive, the SSO can identify them and take measures to prevent potential stowaway incidents. Additionally, conducting a practical headcount helps the SSO track the number of visitors on board at any time.

Prevention is the primary strategy, but the security level at individual ports may require a combination of watchkeepers, shore-based security personnel, or gangway watchmen, especially at high-risk locations. Therefore, vessel operators should confirm requirements with local regulators and adapt to the specific demands of each port. Furthermore, adequate lighting at night is also crucial for gangway watchkeepers to monitor approaching small crafts or inconspicuous visitors. In practical terms, vessels may raise the gangway during low tides or when they have a low freeboard, if permitted by the port authority, to prevent unauthorised boarding.

While gangway watchkeepers stationed at the gangway could significantly reduce the risk of stowaways, it is also essential to recognise that security extends beyond the gangway. A more comprehensive approach, following the recommendations of IMO's [Resolution FAL.13\(42\) - Revised Guidelines on the Prevention of Access by Stowaways and the Allocation of Responsibilities to Seek the Successful Resolution of Stowaway Cases](#)<sup>2</sup>, may be adopted.

## POTENTIAL HAZARDS

Potential gangway hazards include:

- Loose handrails
- Insufficient lighting
- Wet and slippery surfaces
- Unsecured gangway netting
- Poorly positioned nets
- Falling off gangway or ladders
- Movements of the gangway
- Being struck by moving materials

<sup>2</sup> Resolution FAL.13(42) - [Revised Guidelines on the Prevention of Access by Stowaways and the Allocation of Responsibilities to Seek the Successful Resolution of Stowaway Cases](#)

# SAFETY TIPS

Below are some potential practical safety tips and recommendations when using gangways:

- The gangway should be free from repair and attention should be paid to areas where there are aluminum to steel connections. The absence or deterioration of an insulating gasket can lead to electrolytic corrosion, which will cause wastage and weakening of the gangway structure
- The gangway should be inspected regularly to ensure it is in good condition and free from defects
- The gangway should be maintained as per the vessel's planned maintenance system to allow early detection of defective moving parts and ensure it is kept in good condition
- The gangway should be secured to the ship to prevent it from moving or slipping
- The gangway should be trimmed correctly to ensure that it is level and not inclined at an excessive angle. It should not be greater than 30°<sup>3</sup>, nor should it exceed the maximum permitted design angle of inclination, as indicated on the marking plate
- The gangway should be clearly marked with the safe working load to forewarn personnel boarding the gangway and ensure it will not be overloaded
- The gangway should be illuminated adequately to ensure it is visible and safe to use at night
- The gangway should be kept clear of obstructions to provide a safe passage for users
- The gangway should have handrails on each side to provide support and prevent falls
- The gangway should only be rigged by authorised personnel who have received training on gangway operations
- Crew should always wear a safety harness and lifejacket while rigging a gangway
- The gangway should be used with caution, especially when carrying heavy or bulky items which may affect its balance and stability
- Crew should always wear proper footwear that provides good traction and grip to prevent slips and falls
- The gangway should be inspected regularly by the officers on duty or gangway watchmen
- All visitors should be verified against their photo ID and the visitor list
- A proper headcount should be carried out to determine the number of visitors boarded
- A risk assessment should be completed prior to rigging and the gangway secured as per the company's safety management system, SSP and the provided checklists

The master should engage with the port authority or terminal representative to discuss the placement of the gangway, ensuring that the available landing area is sufficient to allow for surge movements or the rise and fall of the tide.

In terms of best practice, the [Code of Safe Working Practices for Merchant Seafarers \(COSWP\)](#) is also widely recognised safe working practice guidance.

<sup>3</sup> IMO circular MSC.1/Circ.1331 – [Guidelines for Construction, Installation, Maintenance and Inspection of Means of Embarkation and Disembarkation](#)

## FOR FURTHER INFORMATION

For further information, please do not hesitate to email [lossprevention@tindallriley.com](mailto:lossprevention@tindallriley.com).

## DISCLAIMER

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