Neopanamax Locks

Neopanamax vessels: *"All vessels with dimensions greater than Panamax that comply with the size and draught limitations of the new locks; namely, 370.33 m (1,215 ft) in length by 51.25 m (168.14 ft) in beam by 15.24 m (50.00 ft), TFW draught."*

Reference: Pancanal OP Notice to Shipping N-1-2024, Section 1m

There is a further vessel categorisation, which refers to vessels that meet the length and beam criteria for the Panamax Locks (when in ballast or part load), but to transit the Panama Canal when fully laden would need to utilise the new locks. This vessel categorisation is known as: 'Panamax Plus'.

Panamax Plus vessels: *"All Panamax vessels authorised for TFW draughts greater than 12.04 m (39.50 ft) up to 15.24 m (50.00 ft) and approved for transit of the new locks."*

Reference: Pancanal OP Notice to Shipping N-1-2024, Section 1q

Note: The latest Pancanal Advisory to Shipping should be checked as 'Panamax Plus' vessels are currently not allowed to book their transits. However, effective since 15th April 2021, they are allowed to participate in the special auction for the additional slot in the Neopanamax Locks.

Reference: Pancanal Advisory to Shipping A-09-2021

Exceptions or exemptions to any of these requirements may be granted subject to approval by the Transit Operations Division Manager.

Ship Type	Max LOA	Max Beam	Max Draught (TFW)	Max Air Draught
Neopanamax	370.33 m (1,215 ft)	51.25 m (168.14 ft)	15.24 m (50.00 ft)	57.91 m (190 ft)
Panamax Plus	294.13 m (965 ft) *Panamax Locks*	32.31 m (106 ft) *Panamax Locks*	12.04 m (39.5 ft) *Panamax Locks* up to 15.24 m (50.00 ft) *New Locks*	57.91 m (190 ft)

Reference: Pancanal OP Notice to Shipping N-1-2024

Time in Neopanamax Locks

The time to transit the Neopanamax chambers can vary due to numerous factors. However, for planning purposes, the following approximate figures can be used:

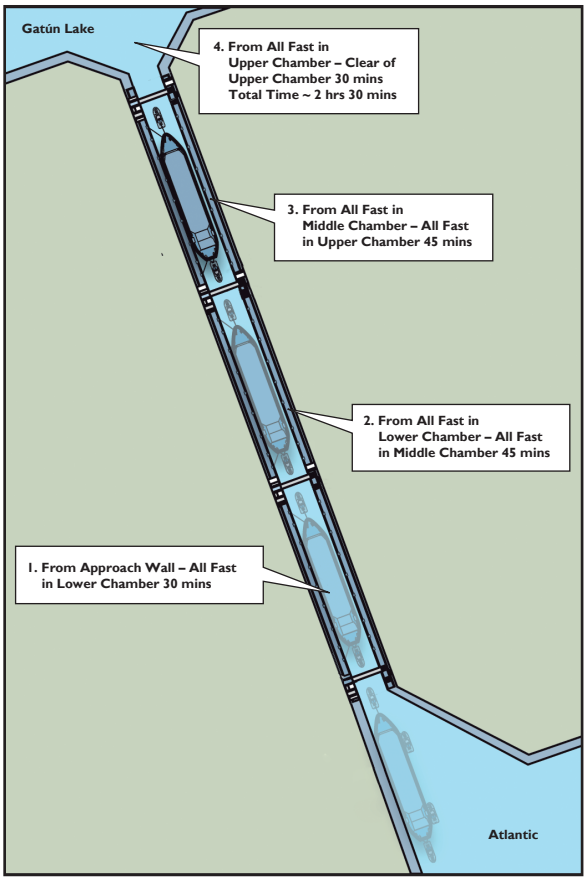


Figure 1.9: Time in Neopanamax Locks (Agua Clara Locks shown)

Vessel Movement in Neopanamax Locks	Duration
From Approach Wall – All Fast in 1st Chamber	30 mins
From All Fast in 1st Chamber – All Fast in 2nd Chamber	45 mins
From All Fast in 2nd Chamber – All Fast in 3rd Chamber	45 mins
From All Fast in 3rd Chamber – Clear of 3rd Chamber	30 mins
Total Est. Time	**2 hrs 30 mins**

Note: When approaching from or transiting to the Pacific side at (or near) HW Balboa, the time spent in the lock chamber nearest the Pacific can be reduced. This is because the water level in the lock chamber is already close to sea level.



Courtesy: Getty images/ ~UserGI15674004

Figure 1.10: Agua Clara Locks Northbound, entering Upper Chamber with Atlantic Bridge in the background

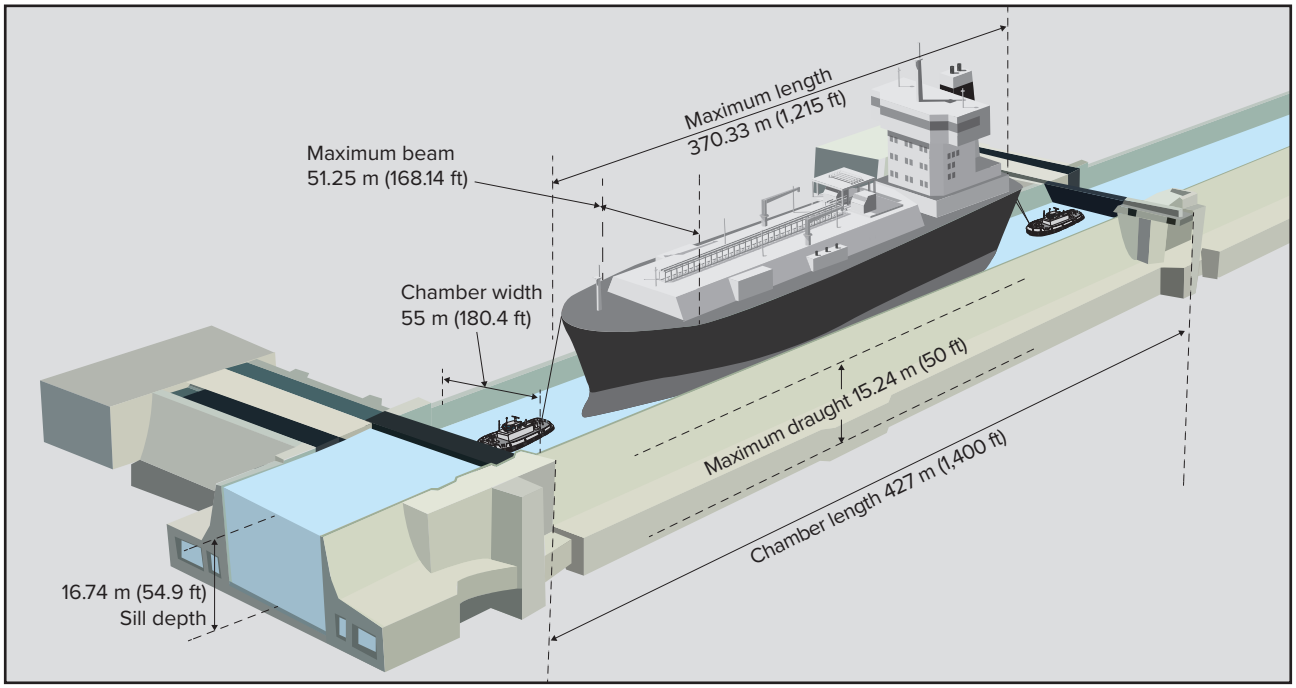


Figure 1.11: Neopanamax Locks diagram
Reference: Pancanal OP Notice to Shipping N-1-2024

Seasonal draught restrictions will be announced with 3 weeks' notice where possible. Check for Advisory Notes at https://pancanal.com/en/maritime-services/advisory-to-shipping/

Note: Seasonal variations to the maximum draught may be in force. See latest Notices to Shipping on pancanal.com for more information.



Courtesy: Autoridad del Canal de Panamá (ACP)

Figure 1.12: Aerial view of Cocolí Locks (viewed from Balboa)



Courtesy: Autoridad del Canal de Panamá (ACP)

Figure 1.13: Aerial view of Cocolí Locks with three LNG carriers transiting simultaneously (viewed from Balboa)

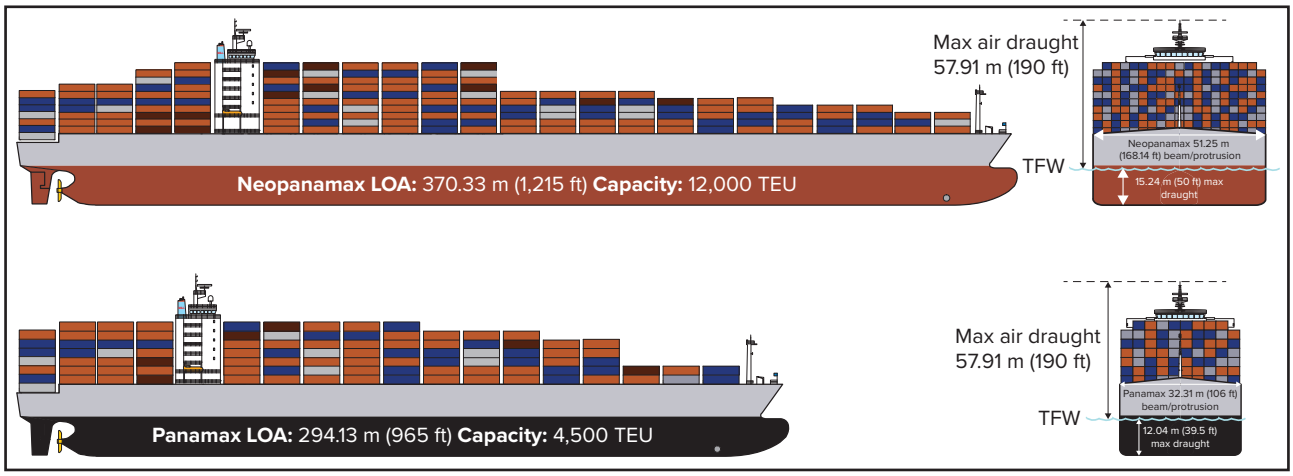


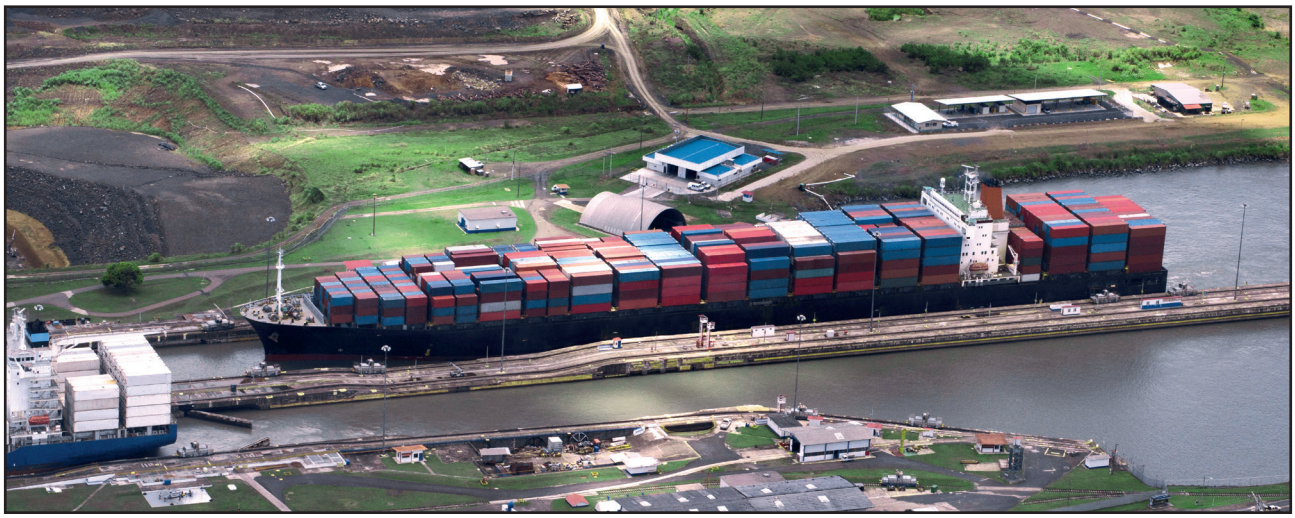
Figure 1.14: Panamax and Neopanamax size comparison
Reference: Pancanal OP Notice to Shipping N-1-2024



Credit: valleybol63

Figure 1.15: Panorama view of Miraflores Locks looking towards Pedro Miguel Locks





Courtesy: Getty images/dani3315

Figure 1.16: Panamax Container Vessel of LOA: 294 m and beam 32.31 m (106 ft) entering Miraflores Locks Northbound



Aerial View of Locks



Gatún Locks



Agua Clara Locks



Cocolí Locks



Pedro Miguel Locks



Miraflores Locks

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UKC, Trim and Draught Requirements

Vessels transiting the Panama Canal must not exceed either the maximum draught permitted by the ACP or their TFW load line draught. Additional draught restrictions may be enforced during unusually dry seasons.

Vessels should also meet the minimum draught requirements of the ACP, having sufficient ballast to allow safe manoeuvring during transit.

If required, seasonal draught adjustments are applied in 15.24 cm steps (6" adjustments to the limit). Advance notification is given by ACP Advisory Notes and typically 4 weeks' notice is given where possible, based on ACP lake level forecast. Vessels already loaded to their maximum draught at the time of Notice of the seasonally reduced draught can be given a waiver to allow their transit, unless there are overriding safety considerations.

Vessels loaded after the notice of a seasonal reduction has been issued may be forced to unload to meet the new draught requirements. A margin of tolerance of 15.24 cm (6 inches) beyond the restricted draught limit must not be exceeded.

Failure to comply with any of the draught requirements may result in denial of transit.

Draughts will be visually confirmed by the Boarding Officer, prior to boarding, from the pilot boat. Additionally, the Lock Master will perform an accurate reading of the actual TFW draught when the vessel is in the uppermost chamber, in still conditions in TFW. If discrepancies arise a more detailed draught survey may be required to ensure that draughts are not mis-declared and that vessels are not overloaded.

Minimum Salt Water Draught

In the Panama Canal, the minimum draughts must be stated for tropical salt water (TSW). These draughts will be confirmed by the boarding officer on arrival in Panama Canal waters.

LOA	Minimum Draught in Tropical Salt Water (TSW)
Up to 129.54 m	Trimmed so Pilot can see over the forecastle from the centre of the navigation bridge
Over 129.54 m	Forward ≥ 2.44 m, Aft ≥ 4.27 m
Over 144.80 m	Forward ≥ 5.50 m, Aft ≥ 6.01 m
Over 160.02 m	Forward ≥ 6.10 m, Aft ≥ 6.71 m
Over 176.78 m	Forward ≥ 6.71 m, Aft ≥ 7.32 m
Over 190.50 m	Forward ≥ 7.32 m, Aft ≥ 7.92 m
Over 304.80 m	Forward ≥ 7.92 m, Aft ≥ 8.53 m
Over 335.28 m	Forward ≥ 8.53 m, Aft ≥ 9.14 m

Any vessel unable to comply with the minimum TSW draught must seek authorisation to transit the Canal from the Transit Operations Division Manager. For detailed requirements see ACP Notice to Shipping No. 1, 'Vessel Requirements' at www.pancanal.com

Under Keel Clearance (UKC)

Vessels transiting at the maximum draught requirement of the ACP will satisfy the UKC requirements of the ACP, which is a UKC of 1.52 m throughout the transit. A reduced UKC can be expected in the chambers. *(ACP draught requirements are static TFW draughts. These maximum draughts have been selected to ensure that a safe navigational margin of UKC is maintained throughout the transit).*

Trim and Visibility Affected by Ship's Structure

Trim (by the head or the stern) must not exceed 1% of LOA or 1.83 m and must not impair manoeuvrability.

(When transiting the Panama Canal, the ACP requires that the water surface ahead of the ship should not be obscured by more than 2 ship lengths, or 500 m ahead of the bow, whichever is less. This refers to the view from the primary conning positions on the bridge, from the head of the ship and to 10° either side on both port and starboard. All requirements for visibility are based on a height of eye of the observer (pilot) of 1.80 m (Added to Height of Wheelhouse Deck (HWH), when calculating Dh1, in the formula in Annex 3)).

In addition:

- Upon arrival at the Canal, 'Blind Distance Declaration' (form 1746) must be completed by the Master and presented to the ACP Boarding Officer (refer to Annex 3)
- any deviation from ACP visibility requirements needs ACP approval or exemption
- cargo may need to be moved prior to transit to improve visibility from the bridge
- the side of the vessel must be fully visible from the bridge wings
- obstructions by cargo or deck equipment should not interrupt the arc of visibility by more than 10°, from any of the primary conning positions.

Note: *"Under no circumstance shall the Master or any member of the crew alter the trim or draught of the ship while in transit, without the prior express approval of the Pilot"* – Article 54 of the ACP regulation for navigation compliance.

Further Details: Vessel Requirements
Edition Date: Current Year (YYYY)
Web Search: Pancanal N-01-(YYYY)
Ref: *4e. Panama Canal Minimum Visibility Requirements*