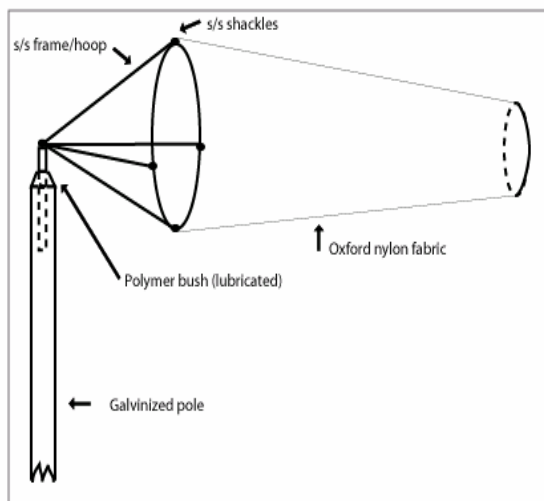


<b>Doc ID</b> 58573792	<b>Custodian</b> Senior Principal Engineer, WT, Engineering	<b>Approved</b> Head of Engineering
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## 1 Purpose

The purpose of this specification is to describe the requirements for windsock assemblies used at Water Corporation sites that store chlorine and/or ammonia.

Note: Windvane assemblies can be used instead of windsocks – refer to:

<https://nexus.watercorporation.com.au/otcs/cs.exe/app/nodes/58574823>

## 2 Scope

This specification applies to all Water Corporation chlorine and/or ammonia facilities that use windsocks to determine the direction of wind in the event of a leak.

## 3 Definitions

N/A

## 4 References

AS 2927 - The Storage & Handling of Liquefied Chlorine

AS 2022 - Anhydrous ammonia - Storage and handling

Dangerous Goods Safety (Storage and Handling of Non-explosive) Regulations 2007 WA

## 5 Specification

- The designer shall determine the required pole diameter and thickness. Consideration shall be given to the highest wind speed expected for the site, the size and weight of the windsock and the length of the pole. An absolute minimum diameter of 53mm shall apply. The pole shall be fabricated from galvanised steel with a machined “Delrin” polymer bush attached to the top.
- The frame and shackles that hold the “sock” shall be fabricated from marine grade 316 stainless steel.
- The “sock” can be either white, yellow, or orange in colour -
  - Dimensions: standard size 300mm x 900mm
  - White and Yellow socks are made from “Weather Max LT” fabric
  - Orange socks are made from a heavier “Sunbrella” colour fast fabric
  - A minimum lifespan of 36 months is required

Note: this will depend on fabric choice, site location and weather conditions etc.  
For areas that are subject to extreme heat and/or windy conditions it is recommended the installation use the orange windsock due to its greater robustness.
- The Windsock Assembly must be installed at chlorine liquid withdrawal facilities, and chlorine and/or ammonia gas withdrawal facilities whose off-site risk potential is significant (i.e. facilities that have multiple drums or cylinders, or that are within close proximity of public or protected places).
- The location shall be in accordance with the following:
  - Located within the site boundary
  - able to be seen from the main entry gate; and
  - placed in a position that is clear of buildings and trees that may interfere with the normal wind patterns.
- For ground level installations the Windsock Assembly may utilise a “Break Back Pole” for ease of maintenance.
- For an elevated installation the Windsock Assembly may utilise a “Safe Swivel Light Pole” for ease of maintenance.

**Note:** This complete Windsock Assembly is available through the following suppliers:

- Taskers <http://taskers.com.au> - (08) 9437 9222 (West Australian)
- Windsocks Australia <https://www.windsocksaustralia.com.au/> – 0468 474 656 (West Australian)
- Glenview <http://www.glenviewproducts.com.au> - (02) 9449 9892 (East Coast)

## 6 Records

Document Revision History	
26 Feb 2002	Document developed by RB & reviewed by NH
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17 Sept 2008	Document placed in Aqua PM# 1087390
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25 Aug 2010	Document reviewed by RB & NH
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14 Sept 2017	Revision table update to remove names
21 Nov 2018	Supplier list amended to remove Adware who aren't being used.
16 Nov 2021	Colour yellow added as option, supplier list updated
18 Dec 2024	Document reviewed by SZ & BM