

Manchester Aquatics Centre





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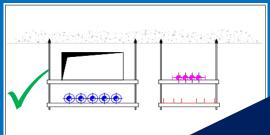
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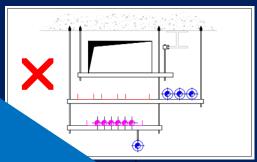
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Supports and Fixings



Services should be evenly distributed

Services should not be hung from brackets installed for other services.



Unistrut Channel used must be Unistrut branded.

Supports and Fixings

The following systems are required to be torqued to correct levels

- All beam clamps and channel nuts used on framing systems and trapeze rods
- All fixings to purlins, beams and metal deck
- All torque controlled fixings into concrete Some examples of commonly used UniStrut fixings are listed below.

Manufacturers literature must be followed.

PNL

Part Number	Finish	Torque Setting					
PNL06	ZP / HDG	12 Nm					
PNS06 PNP06	Stainless Steel	6.5 Nm					
PNL08	ZP / HDG	28 Nm					
PNS08 PNP08	Stainless Steel	16 Nm					
PNL10	ZP / HDG	55 Nm					
PNS10 PNP10	Stainless Steel	31.5 Nm					
PNL12A	ZP / HDG	60 Nm					
PNS12A PNP12A	Stainless Steel	55 Nm					
PNL12 PNP12	ZP / HDG	70 Nm					
PNP16	ZP / HDG	125 Nm					



PNL**



PNS**



PNP**

Supports and Fixings

The installer completes installation of support system / fixing and tightens the nuts and bolts to the manufacturer published torque setting.

Once complete, the installer should mark the head of the hex nut with a marker pen to denote that it has been torqued to the correct setting. The mark should also be extended to the face of the adjoining clamp so that it is easy to identify if the nut has come loose or moved.

Upon completion of the supports and fixings for a zone NGB will undertake a check of 1 in 40 of all installed brackets, and fixings. Marking the fixings with a different colour pen.

Torquing of flanges

DN	PN6	PN10	PN16				
	Bolt Torque (Nm)	Bolt Torque (Nm)	Bolt Torque (Nm)				
10	15	25	30				
15	20	30	30				
20	30	50	50				
25	40	60	60				
32	60	105	110				
40	70	130	130				
50	70	150	150				
65	70	110	110				
80	170	140	140				
100	170	145	150				
125	150	150	150				
150	150	255	250				
200	170	290	240				
250	170	290	350				
300	290	290	470				
350	340	290	510				
400	340	500	740				

Area Classification

Swimming pool environments are extremely corrosive to some materials. It is of high importance that you are aware of what material you should be using in your work area.

A series of area classification drawings have been produced stating what materials can be used in each area. These can range from stainless steel 316, hot dipped galv, pre galvanised, GRP or powder coated.

These drawings are to be consulted prior to works commencing.

If unsure speak to your supervisor or the NGB team and ask to review the <u>Area</u> <u>Classification Drawings</u>.

Area Classification

The image below is an example of an Area Classification Drawing. The coloured areas indicate what materials must be used.

See the drawings for further information



If unsure speak to your supervisor or the NGB team and ask to review the <u>Area</u> Classification Drawings.

Pressfit Pipework

Ensure operative is trained and installer card provided to NGB. NGB will provide unique installer ID.

Pipework is marked using correct socket depth gauge

must be marked with a "V" intersecting the depth mark. Full depth has been achieved when depth line is against the new fitting.



Protection of Pipework



All brass / overlap by 50mm and **Gunmetal fittings** orientated to shed Must be wrapped in **Butyl P10 self-amalgamating** Tape with minimum 50% overlap.

> **Pipework** insulation must be fully vapour sealed externally. Further guidance is available from NGB technical bulletins and installation guidelines

All stainless

must be foil wrapped with

0.06mm

water.

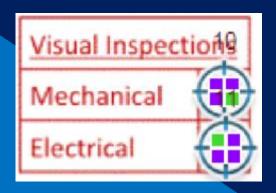
Visual Inspections

All works will be visually inspected using the SnagR mobile App.

Log in details will be provided by NGB to supervisors to complete the first stage of each Visual Inspection.

Steps to carry out a Visual Inspection below:

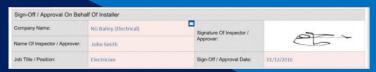
In the SnagR app switch to Inspection mode by tapping the change mode button and navigate to the zone Visual Inspection target and open the relevant inspection.



Visual Inspections

Complete the questionnaire whilst inspecting your works.

The named person signs and dates the visual inspection to confirm works are installed satisfactorily.



Change the workflow to "Ready For Verification" and Synchronise the SnagR app.



NGB management will receive a notification and will inspect the completed works.

For further guidance please speak with a member of the NGB team

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