

Case Study

Blacktown City Council NSW Rooftop Chiller Project

February 2010

M&H Air Conditioning, Warners Bay NSW (Commercial arm of Hastie Services) required the urgent framework for a 5490kg PowerPax Chiller to be sited on the rooftop of Blacktown City Council NSW.

Project Manager, Nathan LUNNEY, contacted HVAC Roof Supports with an urgent request for supports for the Chiller, as the previous Project Manager left the company during the project planning phase, however he hadn't accounted for the support work.

The Chiller was on order, the crane had been arranged, however the oversight of frameworks meant an urgent response was required.

With a fantastic working relationship with the manufacturer of the BigFoot Systems (www.bigfootsystems.co.uk), and through our Australian Distributor, we were able to provide the framework in a cost effective and timely manner.

3 weeks from initial request to on-site delivery, with a CAD drawing of the framework provided, installation instructions, and all calculations completed to accommodate the Chiller safely on the rooftop, in order to spread the load evenly to distribute the weight.

M&H Air employed the services of an independent Structural Engineer to cross reference the data supplied, and was satisfied that the engineering was well made and up to the task.

The below information outlines what was supplied to M&H Air Conditioning -

For 1 x Chiller (5497(l) x 2362(w) x 2483(h) mm @ 5490KG

One framework (5500mm x 2400mm) consisting of:

Framework Hot-Dipped Galvanised Metal in 50 x 50 Section:

2 x 2500mm End Bars (For sides of framework)

2 x 3000mm End Bars (For sides of framework)

2 x Straight Connectors

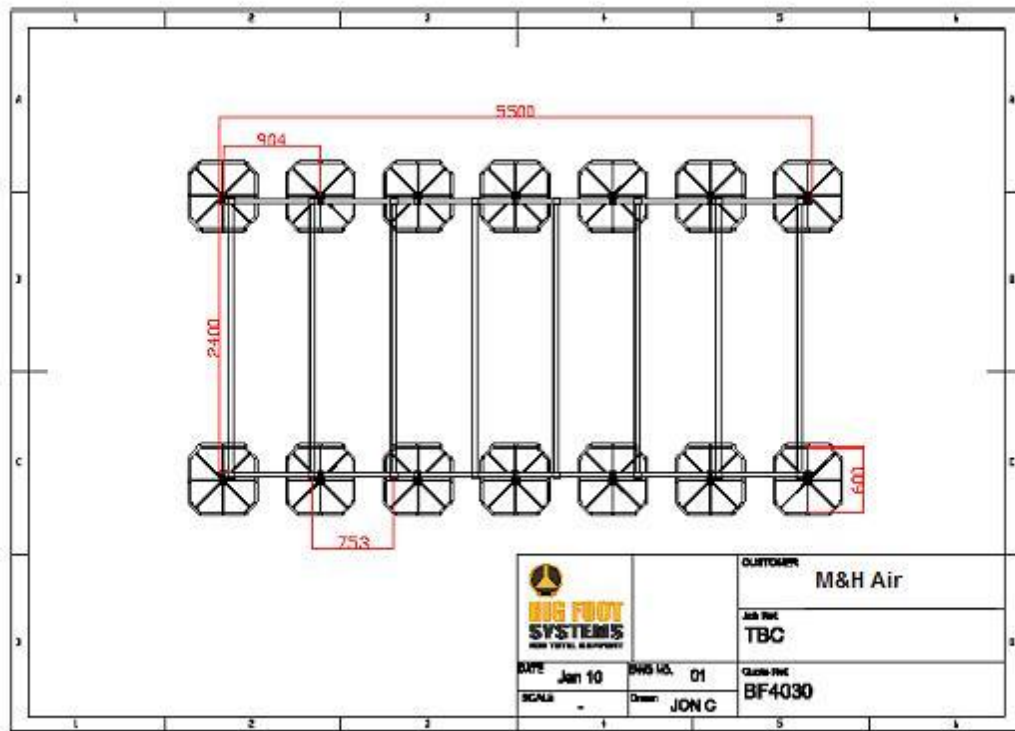
8 x 2400mm Cross Bars **100mm x 50mm** Profile (For Supporting Units)

14 x 600mm² Mega Foot Leg Assemblies (Spread evenly along End Bars)

Clamp Kits

<p>The weight supported on 14 Big Feet will produce a load value per foot of 11.35kN/m²</p>

Actual CAD Drawing provided



Images of Framework Provided following construction





Images of Chiller in situ







Upon completion of all the associated pipework connections, the following images are the end result





The end result was a very satisfactory one from the customer (Blacktown City Council) and M&H Air.