



Consultant Advice

From: William McCulloch **Date:** 19 Mar. 18 **File No:** s29340\003\00\21\ca180316s0001 **Pages:** 1
Project: 85 Carabella Street Kirribilli - Detailed Development Application **No:** G-004[2.0]

	Attention	Company	Email
To:	Cian Fitzgerald	APG	Cian@apg.com.au

Roof Level Mechanical Services

Please find below summary of why mechanical services are required to be located at roof level for the proposed new Innovation Centre at Loreto School in Kirribilli.

Mechanical services are required to be located at roof level for the following reasons:

- Kitchen exhaust is required to discharge vertically at roof level in order to meet code requirements (AS1668.2).
- The condenser units are required to be located within the rooftop plantroom as shown on the concept drawings. During the concept development the only other location for the condenser units that was able to be considered due to site constraints and architectural requirements was adjacent to the North West facade of the building directly adjacent to the property boundary. The plant on the roof was reduced by placing the maximum possible number of units in this location. It is not possible to place all of the units due to the following constraints:
 - Locating all units at the side of the building would result in several of the units having reduced efficiency due to long pipe length which would also have an impact on unit sizing.
 - Locating all units at the side of the building would result in the units having constricted air circulation which would impact on unit efficiency and sizing.

Please do not hesitate to contact the undersigned if you have any queries.

NORMAN DISNEY & YOUNG

William McCulloch
Senior Mechanical Engineer
W.McCulloch@ndy.com