



CASE STUDY:

INNOVATIVE WAYS OF IMPROVING THE
SQUASH EXPERIENCE THROUGH FACILITY
DEVELOPMENT

TARARUA SQUASH CLUB



SQUASH
NEW ZEALAND

OVERVIEW

The Tararua Squash Club, like a lot of clubs throughout the country, struggle with heating and cooling issues. During busy periods such as tournaments and open nights, wet walls becomes an issue not only for spectators, but for the players too. This extra moisture causes a cooler temperature and causes the ball to skid, making the game extremely challenging and frustrating to play. To address this problem, the club initially installed three heat pumps as a way of making the environment more enjoyable for its members by increasing the temperature. However, they mistakenly sealed off the roof flashing and vent holes around the court tins which prevented air circulation and only added to the wet walls problem.

CHALLENGES

Condensation

Moisture in the air from players mixed with cold plaster walls due to poor thermal insulation causes condensation or 'sweating' (a film of water on the playing surface).

Cost

The upfront costs associated with purchasing and installing the heat pumps and insulation, as well as the ongoing electricity costs, which were perceived to be costly to invest in.

Expertise

The club were not shown how to use the heat pumps effectively which contributed towards the lack of air circulation.

SOLUTIONS

Dummy wall

The club asked Sedco Engineering for a solution. A dummy wall was erected over the existing exterior concrete block walls with Pink Batts insulation and water heating coils powered by a heat pump hot water system placed in between finished with Hardiplank exterior cladding.

Cost

The Central Energy Trust provided support to assist the club with the upgrades.

RESULTS

3

Heat pumps installed.

50

Satisfaction and feedback from members.

2

Courts now without the wet walls problem.

CONCLUSION

Although there has been a slight increase in the power bill, feedback from members and results to date suggests that heat pumps can be used to improve heating and cooling issues within the club and reduce the wet walls dilemma.

The key learnings the club found out from this process is that other factors need to be considered which will allow for proper insulation, ventilation and education of members to maximise the potential of heat pumps.