AREMA withdraws support for NCC 2022

AREMA president, Mark Padwick.

THE AIR CONDITIONING and Refrigeration Equipment Manufacturers Association (AREMA) has identified a serious flaw in the proposed 2022 National Construction Code (NCC).

AREMA president, Mark Padwick, said the proposal takes a whole-of-home approach to energy efficiency which includes heating and cooling equipment.

"The approach proposed by the Australian Building Code Board does not ensure reductions in energy use, at least in relation to heating and cooling," he said.

The methodology proposed only considers the efficiency of heat pump systems for heating and cooling, but not the size of the system.

"Most new systems are inverter (variable speed) and one of the ways they get their efficiency is by running at less than rated capacity for much of their operation," he said.

"It is important to understand that smaller systems are typically more efficient than larger ones and maximum efficiency of inverter systems typically occurs at around 50-70 per cent of rated capacity.

"Therefore, without any requirement for the air conditioner's cooling capacity to be matched to the building load it is possible that the builder will select a smaller system because it is lower in cost and meets the so-called efficiency target.

"The perverse outcome is that the undersized air conditioner will spend most of its operating time at maximum capacity and its energy consumption will be higher than projected by the NCC, with higher energy costs and decreased comfort."

Padwick said an undersized system cannot deliver the efficiency, electricity costs or comfort levels projected by the NCC.

"AREMA calls on the Australian Building Code Board to incorporate sizing of heating and cooling equipment into the 2022 National Construction Code," Padwick said pointing out that AREMA cannot support the current approach which will lead to higher energy bills, increased electricity use and a rise in greenhouse gas emissions.