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Water-to-air-heat exchanger and indirect evaporative cooling in buildings with green roofs

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Highlights

- Green roofs may be problematic in climates with high cooling loads when they remain too warm over night
- Water-to-air heat exchangers may provide an additional cooling strategy for buildings with green roofs
- An investigation of the coupling of green roofs with water-to-air heat exchangers is performed
- Test cells using different water-to-air heat exchangers have been monitored in a hot and dry climate for over a year
- The additional benefits of evaporative cooling to the water heat sink tank are assessed

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