

BENTS GARDEN CENTRE



BENTS embrace SUSTAINABILITY

During the construction of phase 2 of the continued development of the 67 acres site Bents as part of their sustainability program choose a heat recovery system from DK Heat. The system uses the waste heat from the food hall cold store to heat the hot water for use in store.

The DK system installed by The Jordon Group was a 1000 litre storage tank with two internal heat exchangers totalling 18kW of heat recovery. The storage tank starts the day with a 1000 litres of piping hot water which is topped up every hour with a further 360 litres of hot water. Any concerns over Legionella are handled by DK's factory fitted Legionella kill unit.

The heat exchangers for the hot water are a twin wall design which ensures that even in a failure situation that the refrigerant and water can never come into contact with one another. This is a legal requirement under EN1717 for any business handling food

The system is simplicity itself, maintenance free, having no moving parts it is highly efficient due to the innovative design of the heat exchangers that can remove up to 100% of the energy produced by the refrigeration plant.

The system currently supplies only the food hall but during stage 3 of the site development the tank will be moved to a new location to enable its connection to other areas of the business, helping with Bents sustainability aspirations and providing even greater cost savings



The system is capable of providing 360 litres of hot water for every hour that Bents is open. Looked at annually that could be as much as 1,300,000 litres of hot water

The annual energy saving would be 80,000 kWh's per year or put into sustainability terms **17 tonnes of carbon** a year

The monetary savings is over **£6,800 per annum** at the current Business Energy Cap

