

## BANKHALL HOUSE



Bankhall House is a stunning new-build Georgian dwelling in excess of 13,000 sq ft with period detailing throughout. Externally, the architecture of the house is in traditional Georgian styling and the property has been built using a lightweight steel structure which is wrapped with ICF (insulated concrete formwork) to create a fast build with high insulation and U-values adding flexibility to the design.

Internally there is an indoor swimming pool, sauna, games room, cinema and gym along with six bedrooms and five bathrooms on the upper floors. The garaging for nine cars has been cleverly concealed with an underground parking area with landscape terracing above, creating the ultimate family dwelling with the use of intelligent home technology to control the heating, lighting and sound systems demanded in this type of high end residential dwelling.

With this stunning house, careful design and planning by Discovery Systems has gone into the lighting, heating/cooling design. By utilising the KNX bus building control system from Jung, a combined user friendly system has been created that will provide comfort, convenience and energy savings for the home owner.

Bankhall has 170 KNX dimmed and switched lighting circuits that can be used to set scenes/moods for each room individually. With some 900 light fittings in the house, the lighting control system allows for scenes to be set for particular instances. KNX also allows lights to be incorporated into other features of a house, including a welcome home function in the evening. When returning home, the owner uses a radio remote to open the driveway gates and this informs the KNX system to light up the driveway, open the garage doors and light the access to the house.

Once entering the house, the lighting is automatically switched and using presence sensors it will only be active for a short duration and will switch off when not required. Once night-time is set, if any of the occupants decide to visit the bathroom during the night an automatic facility to set lights at a very low level is activated, effectively lighting a pathway and not needlessly awaking anyone asleep. Water based under floor heating throughout the entire house with 24 zones, some rooms are controlled using room controllers with built-in thermostats removing the need for separate lighting and heating control. With careful control over the heating and air-conditioning it is possible to provide a sensible and energy efficient control to allow the heating and cooling to seamlessly work together. The whole KNX system works seamlessly from normal comfort mode, lowering temperatures both when rooms are unoccupied and at night when everyone is asleep. This represents a big saving in fuel bills. Bankhall also has complete home network and multi-room audio and video distribution systems by Discovery Systems.