

# Energy Statement

## The Cabbage Patch, Twickenham

### 1. Basic information

Business name & address:	The Cabbage Patch, Twickenham, 67 London Road, Twickenham, Middlesex, TW1 3SZ
Date & time of visit:	25th May 2021 Arrived at 9am, departed at 1:30pm
Manager on duty:	GM: Stuart Green (not on site during visit). Deputy: Connall Head Chef: Abhay Lotlikar
Opening times:	Opening Times: <ul style="list-style-type: none"><li>• Mon - Weds: 12 Noon - 11pm</li><li>• Thurs: 12 Noon - 11:30pm</li><li>• Fri &amp; Sat: 11am - 11:30pm</li><li>• Sun: 12 Noon - 10pm</li></ul> Food service times: <ul style="list-style-type: none"><li>• Mon - Fri: 12 Noon - 9pm</li><li>• Sat: 11am - 9pm</li><li>• Sun: 12 Noon - 8pm</li></ul>
Cleaning times:	Cleaners in between 5am - 8am. Connall explained that they're normally gone by the time he arrives at 8am.

### 2. Lighting

Main internal lighting and control types:	Trade area - ground floor <ul style="list-style-type: none"><li>• Bar &amp; restaurant lighting comprises a mix of spots, wall lights and pendant fittings. Lamp types are a mix of LED and non-LED.</li><li>• Connall checked with Stuart who confirmed that following a survey, LED re-lamping was not authorised due to cost. Connall also explained that the official route for ordering lamps is too expensive, so lamps tend to be purchased locally.</li><li>• Control is via banks of manual switches located at bottom of stairs and slide dimmers. Due to worn labelling Connall is switching on all manual switches. Slide dimmers control lighting levels in the saloon (bar), restaurant, patchworks and studio.</li></ul>
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	<p><b>Recommend lighting is not switched on in areas that are not in use.</b></p> <p>1st floor (nightclub).</p> <ul style="list-style-type: none"> <li>• LED spots countersunk into the ceiling. The type of LED spotlight is consistent throughout which suggest this area has been re-lamped at some point.</li> <li>• Control is via a Mode slide dimmer system with integrated on / off button. Lights are being left on but when switched off these lights remain on a low dimmed setting (deliberate for health and safety reasons?).</li> <li>• Bank of manual switches located in cloakroom area includes switches for extract and toilets. Toilet lighting has tripped (Connall explained that water has been leaking through ceiling of cloakroom area)</li> </ul> <p><i>NB: Hiss from speakers in nightclub suggests sound system is still on. The amps are located in the room behind the cloakroom. <b>Recommend nightclub amps are switched off.</b></i></p> <p>Back of house</p> <ul style="list-style-type: none"> <li>• Fluorescent bulkhead and strip lighting on manual switches.</li> </ul> <p><b>Property: Recommend the potential to carry out LED re-lamping in front and back of house areas is revisited.</b></p>
Are lights left on overnight? If so, why?	All lights are switched off overnight.
Are all switches clearly labelled?	Switches are labelled well. However, many of the labels are worn and would benefit from being renewed.  <b>Recommend labelling of light switches is renewed.</b>
Is lighting zoned?	Yes. See above.
Are PIR movement sensors in use in any front or back of house areas?	None fitted.
Main external lighting and control types:	Outside lights are controlled by labelled manual switches.
Are all external lights turned off overnight? If not, why?	Yes.

### 3. Heating & cooling

What is the main type of heating / cooling system(s)? How is it controlled?

### Central heating

- Boiler room
  - Ideal Ecomax wall mounted gas boiler.
  - Separate timer controls for Bar (bottom timer), Flat (middle timer) and Nightclub (top timer). See below.
- Bar central heating
  - Drayton LP111 single channel timeclock located in boiler room.
  - Honeywell thermostat located behind bar opposite glass wash area. **This is not an ideal location!**
  - Radiators fitted throughout downstairs trade areas. Most (but not all) are fitted with TRVs.
- 1st floor flat central heating
  - Flat on 1st floor is occupied by care taker. Also other rooms on the 1st floor (bathroom, kitchen and several rooms being used for storage).
  - Newlec timeclock located in boiler room. This offers separate time control of heating & hot water.
  - Unable to access flat to confirm presence of a thermostat. However, an old Drayton thermostat was found at the top of the stairs (not sure if this is still working or redundant).
  - TRVs fitted to rads.
- Nightclub central heating
  - Honeywell thermostat located in cloakroom.
  - Honeywell ST9100S Timeclock located in boiler room.
  - TRVs fitted to rads.

### Air conditioning

- Ground floor trade area - no a/c fitted.
- Back office a/c comprises x 1 one-way unit controlled via a remote controller.
- Patchworks a/c comprises x 2 units (one way and 4 way) controlled by separate Daikin controllers in back corridor.
- Nightclub a/c comprises x 4 units controlled by 4 x separate controllers located behind the bar.
  - 'Centre Bar' 4-way unit did not operate when the older style Panasonic was switched on.

	<ul style="list-style-type: none"> <li>○ 'Stage' unit. Daikin controller blank. Off at distribution board (tripped?).</li> </ul>
<p>Is the heating / cooling system(s) set to appropriate temperature and time settings? Is air conditioning only being used when needed?</p>	<p><b><u>Central heating.</u></b></p> <ul style="list-style-type: none"> <li>• Bar <ul style="list-style-type: none"> <li>○ Timeclock set to constant, thermostat set to c 25 deg C. As such heating will have been working 24/7 to maintain this temperature.</li> <li>○ <b><u>Set to timed during the visit. 9am - 10:30pm daily.</u></b></li> <li>○ <b>Recommend thermostats are not set higher than 21 deg C.</b></li> </ul> </li> <li>• 1st floor flat. <ul style="list-style-type: none"> <li>○ Timeclock set to all day (heating) and timed (hot water).</li> <li>○ <b><u>Not adjusted during visit due to the sensitivity of someone living on site.</u></b></li> <li>○ <b>Recommend exploring the potential to set flat heating to timed and 21 deg C.</b></li> </ul> </li> <li>• Nightclub <ul style="list-style-type: none"> <li>○ Timeclock set to constant, thermostat set to 23 deg C. As such, heating will have been working 24/7 to maintain this temperature.</li> <li>○ <b><u>Area not in use, so switched off at timeclock during visit.</u></b></li> </ul> </li> </ul> <p><i>All of the above changes were discussed with Connall during the visit.</i></p> <p><b>Recommend setting heating to timed and switching it off at the timeclock during warmer summer months. This would be worth around £2k per annum.</b></p> <p><b><u>Air conditioning.</u></b></p> <ul style="list-style-type: none"> <li>• A/C in Patchworks and Nightclub set to minimum temperature in Cool mode (16 - 17 deg C).</li> <li>• A/C in back office set to 18 deg C cool. Connall explained that it can get pretty cold after it's been on for a while!</li> <li>• <b><u>All A/C adjusted to 24 deg C during visit.</u></b> This will ensure active air conditioning only kicks in once the temperature exceeds 24 deg C.</li> </ul>

	<p><i>Setting A/C significantly lower than 24 deg C won't make it get cooler any quicker <u>but it will put the equipment under enormous strain</u>, thereby wasting energy and increasing the chance of equipment failure.</i></p> <p><b>Recommend that air con is only used when needed and cooling set point is not set lower than around 24 deg C. This would help deliver savings of at least £1k per annum.</b></p>
Are Thermostatic Radiator Valves (TRVs) fitted to radiators? If so, are they working / set correctly?	<p>Good to see most rads with TRVs switched off in areas not in use.</p> <p>TRVs fitted to two rads in patchworks ladies toilets were found to be set to 3. <u>Both turned off during visit.</u></p> <p>A few TRVs fitted to rads in nightclub were found to be on. <u>These were switched off during the visit.</u></p>
Are radiators blocked by furniture restricting air circulation?	Some rads are obstructed by furniture.
Is there any exposed pipework that could be insulated?	<p>Yes - in boiler room.</p> <p><b>Property: Recommend exposed pipe work in boiler room is insulated.</b></p>
Are external doors and windows closed when heating / air conditioning is on?	Central heating is currently on whilst doors are being propped open to promote ventilation. Unavoidable at the current time. This is a further reason to switch heating off as soon as it's warm enough to do so.
Is there evidence of problems with double glazing (e.g. moisture between panes).	Double glazing fitted in to wooden frames. All units appear good.
Is there adequate draught proofing on windows and external doors?	<p>Mostly good.</p> <p>Greatest need for draught exclusion appears to be around main external doors.</p> <p><b>Property: Recommend draught exclusion is fitted around external doors.</b></p>
Are overdoor heaters fitted? If so, how are these controlled?	No.
Are any external heat lamps fitted? If so, how are these controlled?	<p>Yes.</p> <p>Connall explained that the building mounted heat lamps at the front and rear have not worked for some time.</p> <p>2 x Jumbrellas in the beer garden are each fitted with 4 x heat lamps.</p> <ul style="list-style-type: none"> <li>Isolation switches are located by the building.</li> </ul>

	<ul style="list-style-type: none"> <li>One of the Jumbrellas is fitted with a manual on / off switch. The other is fitted with a 'key switch' - Connall explained this tends to remain on all day.</li> </ul> <p><b>Property: Recommend both Jumbrellas are fitted with timer delay switches to ensure the heat lamps do not remain on when not needed.</b></p>
What type of hot water heating system is fitted and how is it controlled?	Two hot water storage tanks in boiler room. These are heated via a secondary circuit from the gas boiler. Top up / back up heating is provided by immersion heaters.
Is the hot water system set to an appropriate temperature and time setting?	Thermostat fitted to the of both hot water storage tanks are set to 60 deg C. OK.

#### 4. Ventilation

What type of ventilation system(s) and controls are present?	<p>Kitchen ventilation</p> <ul style="list-style-type: none"> <li>The fans are switched on / off via manual isolation switches.</li> <li>Fan speed is via separate dial type fan speed controllers for supply &amp; extract.</li> </ul> <p>Nightclub.</p> <ul style="list-style-type: none"> <li>A wall fan in the nightclub was found to be switched on. <u>Switched off during visit.</u></li> </ul>
Is kitchen ventilation being turned on in line with equipment start up times?	Fans switched on from 10am at same time as kitchen equipment.
Is kitchen ventilation being proactively controlled during trading?	Abhay explained that fan speed is increased from 3 during prep to 5 (max) during service.

#### 5a. Kitchen equipment

Kitchen equipment inventory:	<p>Inventory</p> <ul style="list-style-type: none"> <li>Valentine twin electric fryer</li> <li>Falcon double burner gas chargrill</li> <li>Falcon 6 burner gas range.</li> <li>Falcon dominator gas Salamander grill</li> <li>Bakers Pride twin electric pizza oven</li> <li>Various under counter door &amp; drawer refrigeration incl. Interlevin salad deck.</li> <li>2 heated gantries, each with 2 x tiers of 4 x halogen heat lamps.</li> </ul>
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<p>Is equipment switched on in line with heat up times so it is ready when needed and not before?</p>	<p>Abhay Lotlikar is head chef.</p> <p>Observed equipment switch on</p> <ul style="list-style-type: none"> <li>Fans, dishwasher, Combi-oven, Fryer, and top part of pizza oven and 4 x heat lamps - all on at 10am.</li> <li>Salad deck running overnight, although nothing is being stored in it (contents are removed and put in fridges). <u>Agreed with Abhay that this should be switched off overnight.</u></li> </ul> <p>Abhay explained that:</p> <ul style="list-style-type: none"> <li>Pizza oven needs 1 hour to heat up (OK, so could it be switched on at 11am?).</li> <li>Abhay confirmed that Fryer* not needed for prep on day of visit. This only needs 15 minutes to heat up - could it be switched on later?</li> </ul> <p>*Batches of chicken wings need to be fried during prep c 2 or 3 times per week (this happened yesterday).</p> <p><b>Recommend a start up check list is implemented that takes into account respective equipment heat up times and when each item is needed for prep and full service. This would be worth around £2,500 per annum.</b></p>
<p>Are fridges &amp; freezers defrosted regularly? Are doors &amp; seals in good condition?</p>	<p>Door and seals appear to be in generally good condition.</p>
<p>Are insulating curtains fitted to walk-in refrigeration?</p>	<p>Tandem walk in fridge &amp; freezer. Blue insulating curtains fitted to both. Good.</p>
<p>Is the dishwasher being turned on when the first tray is full?</p>	<p>Dishwasher switched on at 10am. Lots of pot washing carried out from 10:15. OK.</p>

### 5b. Cellar equipment

<p>Cellar equipment inventory:</p>	<p>Inventory</p> <ul style="list-style-type: none"> <li>Luve twin fan chiller. Controller is an Asquith unit fitted outside the beer cellar.</li> <li>Numerous beer dispense coolers* - 8 large (2 of these switched off) and 2 small. None fitted with timers.</li> <li>Hyper Warwick post mix dispense chiller x 2 (one currently switched off).</li> </ul> <p>*A further 4 x beer dispense coolers located in external bar (bar not currently in use, all are switched off).</p>
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What is the actual temperature in the cellar?	Temperature around 12 deg C.
What is the set point temperature of the cellar chiller? Any scope for adjustment?	Set point temperature is 11 deg C. This is in line with best practice (11 - 13 deg C).
Are timers fitted to beer / post mix dispense chillers? Are they working / set correctly?	No. <b>Property: Recommend fitting timers to all beer dispense and post mix coolers. This would be worth around £250 per unit per annum.</b>
Is the cellar an appropriate size? Would segregation help to improve cooling efficiency?	Main beer cellar size is ok.
Are there any gaps in insulation? Is the cellar door being kept shut?	Cellar door itself is ok but no self closer fitted and there is large gap between door frame and wall.  Ceiling of cellar has been dry boarded and an attempt has been made to seal gaps with duck tape. However, there are plenty of gaps that will be letting cold air escape and heat to get in.  <b>Property: Recommend self closer is fitted to cellar door and gaps in insulation are filled.</b>

### 5c. Bar equipment

Bar equipment inventory:	<p>Main bar</p> <ul style="list-style-type: none"> <li>• 5 x double &amp; 1 x single bottle fridges</li> <li>• Matthew Algie coffee machine (twin pressure vessel).</li> <li>• Maida Evolution 501 glasswasher.</li> </ul> <p>Patchworks</p> <ul style="list-style-type: none"> <li>• Various undercounter refrigeration plus a couple of countertop Redbull fridges. <ul style="list-style-type: none"> <li>○ Fridges are on. Some have stock in, some are empty. Connall explained that these are being used for overflow stock and for staff food. <b>Could these be switched off whilst the room is not in use?</b></li> </ul> </li> <li>• Maida GS451 glasswasher. <b><u>On and set to Programme no. 2. Hot to the touch! This area is not in use so it may have been on for some time. Switched off during visit.</u></b></li> </ul> <p>Nightclub</p>
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	<ul style="list-style-type: none"> <li>• Various undercounter refrigeration plus a couple of countertop Redbull fridges. All stock removed and switched off.</li> <li>• Maida Evolution 405WS glasswasher. Off.</li> </ul>
Is the coffee machine switched off overnight?	<p>Left on overnight.</p> <p><b>Recommend this is switched off overnight. This would be worth around £250 per annum.</b></p>
Is the hot water boiler switched off overnight?	N/A
Are bottle fridge seals in good condition?	Yes, all good.
Are bottle fridge lights turned off overnight?	Yes.
Are pull out filters fitted to ice machines clean?	Pull out filter not fitted.
Is the glass washer being turned on when the first tray is full? Where two glass washers are fitted, is the second machine only being used during busy periods?	<p>Staff confirmed that the glasswasher is switched on around 11am but can be earlier depending upon who's in.</p> <p><b>Recommend that the glass washer is not switched on until the first tray is full. This would be worth around £200 per annum.</b></p>

## 6. Water use

Is there any evidence of water leaks inside or outside the building?	<p>Ice machine was constantly venting water - this varied from a trickle to quite a significant pour. This may suggest an issue with the machine.</p> <p><b>Recommend keeping an eye on this. If it gets worse, place a call for repair. A constant flow of water could end up costing you £2 - £10 per day!!</b></p>
Are taps left running? Are there any dripping taps or overflowing toilets in need of maintenance?	<p>Hot push tap in gents in Patchwork's is constantly dripping.</p> <p><b>Recommend placing a call for repair. This could prevent water wastage of c £150 per annum - more if the drip remains unchecked and gets worse.</b></p>
Is there scope for push button taps?	Push button taps fitted in Patchwork's gents & ladies.
How frequently are urinals flushing?	<p>Water supply not fitted to urinals in main trading space.</p> <p>Urinals in Patchworks gent's is not fitted with a water saving device. Flow is minimal, but urinals likely to be flushing once every 20 - 30 mins.</p>

	<p><b>Property: Recommend fitting a water saving device. This could help prevent water wastage of c £500 per annum.</b></p> <p>The device would prevent water wastage overnight but also during the days when the Patchworks area is not in use.</p>
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**7. Incoming services**

Electricity:	AMR enabled meter located in cellar.
Gas:	<p>Gas meter located in cellar. Connected to AMR device.</p> <p>S/N: 4819676 S</p> <p>RDG: 147677 ft3</p>
Water:	Meter pit marked 'Water' located in pavement at front of business. Full of water and could not see meter.