SITE survey. APP

SITE SURVEY REPORT

Chiller Maintenance

Prepared for	Taff Commercial Estates Ltd
Date	1 Oct 2026
Site	Westgate Business Centre, Cardiff
Prepared by	L. Pritchard

FORM

Chiller Maintenance

1. Record details and scope

Project	Westgate Business Centre, Cardiff: chiller quarterly maintenance (completed example)
Site or premises address	Westgate Business Centre, Cathedral Road, Cardiff
Client or organisation	Taff Commercial Estates Ltd
Record date	1 Oct 2026
Person completing the record	L. Pritchard

For competent chiller technicians using the manufacturer procedure. This record does not calculate statutory leak-check intervals, authorise refrigerant handling or replace pressure-system examinations.

Chillers holding F gas are covered by the retained Regulation (EU) No 517/2014 on fluorinated greenhouse gases: article 4 sets leak check intervals by tonnes CO2 equivalent (every 12 months from 5 tonnes, 6 months from 50 tonnes, 3 months from 500 tonnes, doubled where a leak detection system is fitted) and article 6 requires the operator to keep records for at least 5 years. Where the refrigerant circuit is a pressure system, the Pressure Systems Safety Regulations 2000 require a written scheme of examination and examinations by a competent person. BS EN 378 (Refrigerating systems and heat pumps, safety and environmental requirements) covers maintenance and repair. Keep the refrigerant records separately or by a clearly linked reference.

2. Equipment and work

Chiller asset ID and location	CH-01, roof plant deck
Is the chiller on the roof or outside?	Yes
Where is the chiller?	Roof plant deck, north end · 51.487120, -3.195330 (ST 17101 77141, ±5 m)
Smallest clearance in front of the condenser air inlet (m)	0.32

Smallest clearance in front of the condenser air inlet (m): measuring photo



Minimum clearance in the maker's manual (m)	1.50
Clearance against the manual	Less than the manual

> Less clearance than the maker asks for. Warm air can recirculate into the condenser. Record what is in the way and who was told.

Manufacturer, model and serial number	Air-cooled packaged chiller, model and serial number on the asset register TCE-AR-0031
Maintenance procedure and revision	Chiller quarterly service task sheet MT-CH-Q rev 4
Technician and competence reference	L. Pritchard, refrigeration engineer, F gas certificate held, company training record RF-0094
Planned work and exclusions	Quarterly service: condenser coils, water strainer, flow switch, controls and alarms, operating readings. Excludes compressor oil analysis and leak repair.
Safe isolation or permit reference	Permit PTW-WBC-1001-01 for strainer cleaning. Chiller isolated at the local isolator during strainer work only.

3. System information

Refrigerant type and charge from equipment records	R134a, charge as recorded on the asset register
F gas register and leak-check reference	F gas register TCE-FG-01, last leak check LC-CH01-0701
Water circuit, treatment and set-point references	Closed chilled water circuit, treatment record WT-WBC-09, leaving water set point 7 °C
Operating hours and reported alarms	Compressor hours 21,640. One low flow alarm on 2026-09-19 reported by the BMS

4. Service checks

Heat exchangers and air paths checked to procedure	Action needed
Action, limitation or reason not applicable	Condenser coils on circuit 2 partly blocked with leaves and debris. Cleaned with a soft brush and low pressure water.
Water flow, strainers and visible leaks checked	Action needed
Action, limitation or reason not applicable	Strainer on the chilled water return partly blocked with debris. Cleaned, likely cause of the low flow alarm.
Compressor condition and oil observations recorded where applicable	Acceptable
Controls, alarms and safety devices checked to procedure	Acceptable
Checks acceptable	2
Needing action	2
Not checked	0

> Chilled water temperatures
> Take them with the chiller running steadily. The set point, allowed difference and design figure come from the controls schedule and the commissioning record; the form sets none.

Leaving chilled water set point (°C)	7.0
Allowed difference from the set point (± K)	1.0
Measured leaving chilled water (°C)	7.2
Measured entering (return) chilled water (°C)	12.3
Design entering to leaving difference (K)	5.0
Measured difference (K)	5.1
Share of the design difference (%)	102
Leaving water against the set point	Within

Other measured values 1: Strainer pressure drop before cleaning

Measurement point and parameter	Strainer pressure drop before cleaning
Actual value and unit	42 kPa
Acceptance range and source	Clean at 30 kPa, task sheet MT-CH-Q

Instrument ID and calibration reference	Test gauge set PG-04, calibration CAL-PG-04-2026
Assessment	Outside criterion
Response to exception	Strainer cleaned. Pressure drop after cleaning 12 kPa.

Other measured values 2: Condenser fan motor current, circuit 2 fan 1

Measurement point and parameter	Condenser fan motor current, circuit 2 fan 1
Actual value and unit	4.1 A
Acceptance range and source	4.6 A full load on the motor plate
Instrument ID and calibration reference	Clamp meter CM-07, calibration CAL-CM-07-2026
Assessment	Within criterion

Defects found 1: Condenser coil, circuit 2

Where on the chiller	Condenser coil, circuit 2
Defect	Coil face partly blocked with leaves and debris.
Priority	Soon: before the next visit
Put right on this visit?	Yes

Photos of the defect



Defects found 2: Chilled water return strainer

Where on the chiller	Chilled water return strainer
Defect	Strainer basket partly blocked, likely cause of the low flow alarm on 19 September.

Priority	Soon: before the next visit
Put right on this visit?	Yes

Photos of the defect



Defects found 3: Air inlet side, beside the plant screen

Where on the chiller	Air inlet side, beside the plant screen
Defect	Pallets of roofing slabs stacked against the plant screen in front of the circuit 1 coil, leaving less clearance than the maker's manual asks for.
Priority	Routine: at the next planned visit
Put right on this visit?	No
What happens next, and who	Facilities manager asked to have the slabs moved off the plant deck by the roofing contractor. Check on the next visit.

Photos of the defect



Defects found	3
Urgent	0
Soon	2
Routine	1
Still open	1

5. Work and handback

Work performed and parts used	Cleaned condenser coils on circuit 2 and the chilled water strainer. New strainer basket gasket fitted.
Post-work tests and evidence	Chiller restarted at 14:10, ran for 45 minutes with no alarms. Flow switch proved by the BMS.
Equipment handback	Available within recorded limits

Condition and work evidence photos





6. Actions and review

Are further actions required?	Yes

Further action 1: Ask the landscaping contractor to clear leaves from the roof plant deck each month in autumn.

Action and evidence reference	Ask the landscaping contractor to clear leaves from the roof plant deck each month in autumn.
Person responsible	Building manager
Target date	15 Oct 2026

Action status	Open

Further action 2: Check BMS trend for any further low flow alarms over the next two weeks.

Action and evidence reference	Check BMS trend for any further low flow alarms over the next two weeks.
Person responsible	L. Pritchard
Target date	15 Oct 2026
Action status	Open
Outstanding limitations and information to pass on	Compressor oil analysis not part of this visit. Readings taken at part load on a mild day.
Record status	Ready for review
Reviewed by	G. Llewellyn, contract manager
Review date	2 Oct 2026
Author signature	

Signing records the information entered. It does not itself certify legal compliance, remove a limitation or authorise unsafe work.