

PRE-INSTALLATION PACK

Everything your builder, IT person and *RPA* need to know.

A practical, room-by-room checklist for installing the Carestream CS8200 3D — covering electrics, network, radiation protection and training prep. Print it, tick it, hand it to your contractor.

QUESTIONS ON THE INSTALL?

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02 · READ ME FIRST

How to *use* this pack.

We've installed over 500 CS8200 systems across the UK. The biggest cause of delay is always the same: a missed detail in the room prep. This pack is the cure.

1

Print & tick. Hand pages 5–7 to your builder. They've seen it before.

2

Send pages 8–9 to your IT. Computer and network spec, in plain English.

3

We do the RPA bit. Page 10 explains. We draw the plans for you.

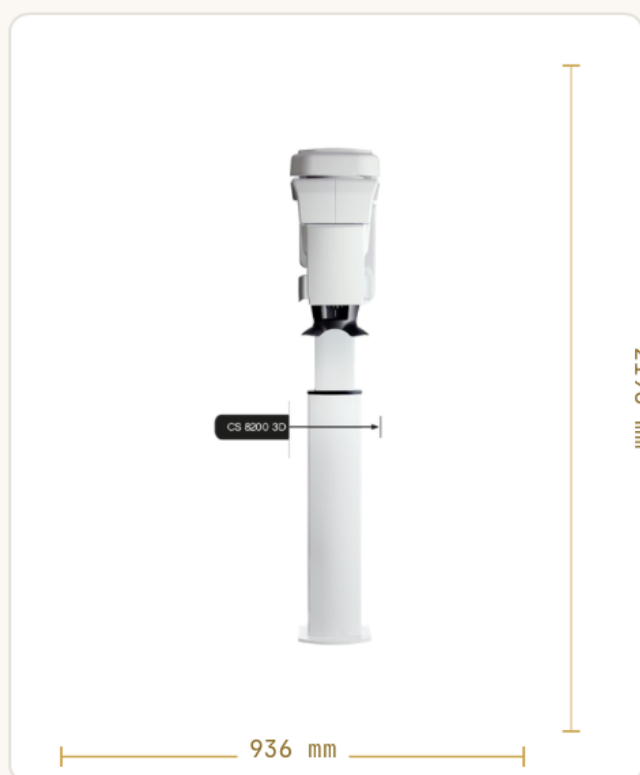
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01 · FOR YOUR ARCHITECT OR BUILDER

Room *dimensions.*

Two configurations — with and without the cephalometric arm. Patient is forward-facing on both, which keeps claustrophobic patients calm.

CS8200 · WITHOUT CEPH


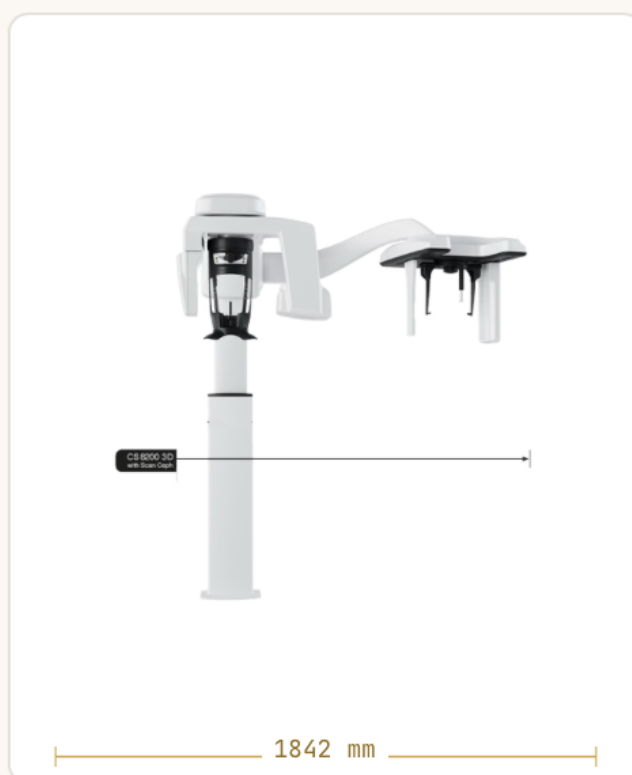
Width 936 mm

Depth (sensor extended) 1133 mm

Max extended height 2196 mm

Min height incl. patient chair 1596 mm

Min room (W × D) 1.5 × 1.0 m

CS8200 · WITH CEPH ARM


Width (ceph extended) 1842 mm

Depth (sensor extended) 1133 mm

Max extended height 2196 mm

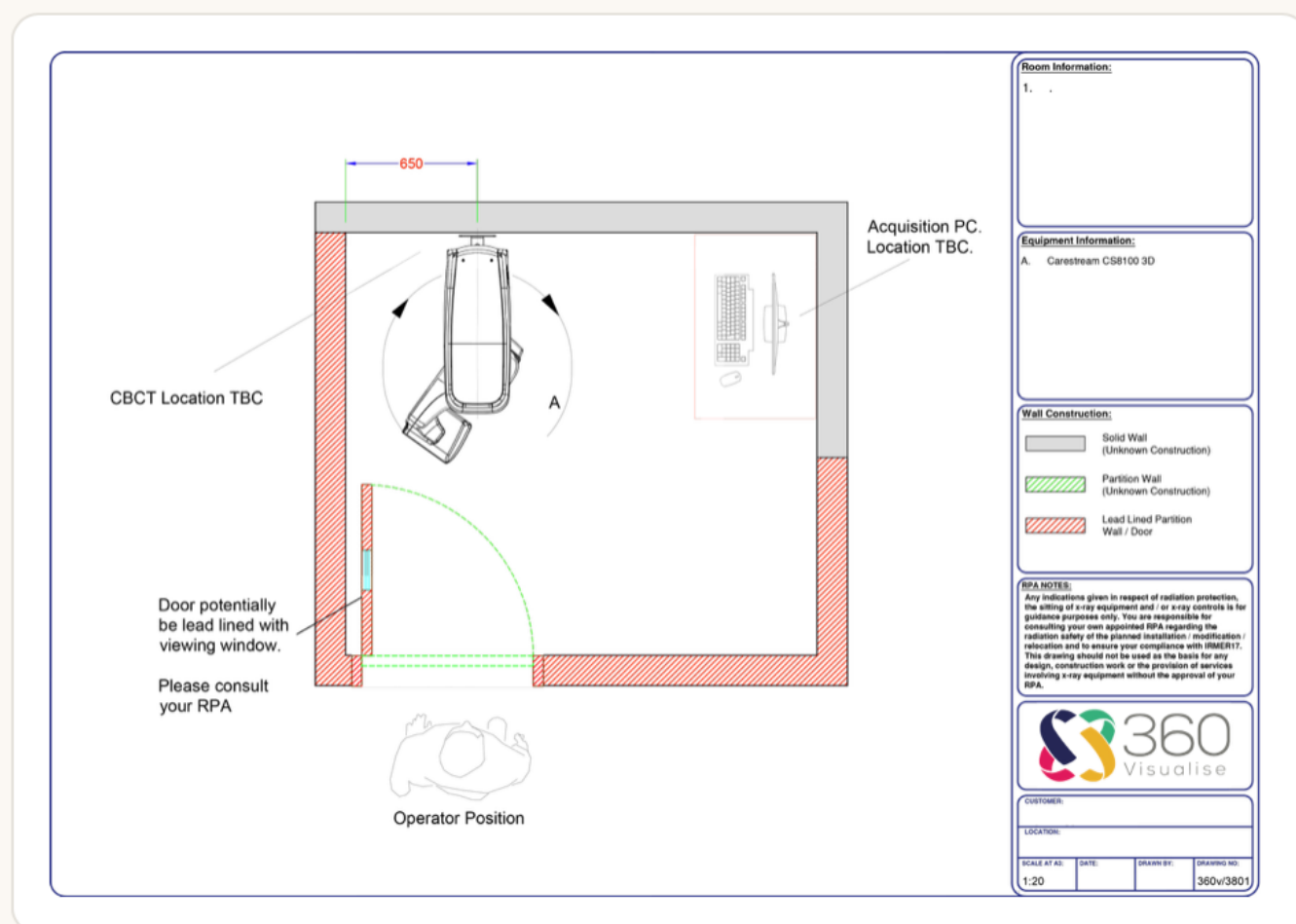
Min height incl. patient chair 1596 mm

Min room (W × D) 2.5 × 1.5 m

02 · A FLOORPLAN THAT WORKS

Example *layout*.

The smallest comfortable room. Patient enters, faces the operator's window, scans, leaves. Nothing fancy — just enough room for chair, machine and one operator.

**A**

Forward-facing patient. Door visible from chair — reduces claustrophobia.

B

Lead-lining advice on request. Share your room and its adjacencies — we will outline what is likely required.

C

Save 30% on RRP of custom-made leaded doors with 360v. Order doors with the machine — doors.360v.co.uk.

Indicative only — your actual room plan is drawn by us and signed off by your RPA before any work begins.

03 · HAND THIS PAGE TO YOUR ELECTRICIAN

Electrical *checklist.*

Four items. Get these right and the install is half-done before we arrive.

1

16 A clean, non-fused supply

16 A

DEDICATED CIRCUIT

NON-FUSED ISOLATOR

☐

A dedicated 16 A circuit. **Not** shared with sockets, lights or any other equipment. Include a non-fused isolator at machine base.

2

Cabling at the machine base

Network	1 × Cat5e to PC position
X-ray button	1 × 2-core bell wire / alarm cable to operator position
Emergency override	2-pole non-fused switch wired by your electrician

☐

Run these to the bottom of the column, leaving 2 m of slack each:

3

X-ray button at operator position

Our engineer fits the button at install – your electrician just needs to land the 2-core cable from the machine base at a back-box where the operator will stand. Aim for clear sightline to the patient through the screen / viewing window.

☐

4

Multiple X-ray devices? Fit a 3-way switch

If the room also houses an intra-oral arm, you legally need an external 3-way non-fused switch that prevents more than one device being powered at any time. We can supply.

☐

04 · TALK TO YOUR RPA FIRST

Warning *lights.*

Older guidance treated warning lights as mandatory. In practice, they're often *not* required on a modern CS8200 install — though some RPAs still recommend one. Your RPA's risk assessment is the deciding voice; we'll fit lights if asked.



Stage 1 — Ready

Lit whenever mains power is on. Tells anyone approaching that the controlled area exists.



Stage 2 — Emitting

Active only during the few seconds of exposure. Auto-triggered by the unit.

Trefoil + legend

Each lamp must:

- ☐ Carry the radiation trefoil symbol ☢
- ☐ Show the legend "X-RAY ON — DO NOT ENTER" (or equivalent)
- ☐ Comply with the H&S (Safety Signs & Signals) Regs 1996
- ☐ Operate **automatically** — no manual switch



Where the original guidance came from: HPA-CRCE-010 (2010) recommended two-stage warning lights for dental CBCT. Modern interpretations vary — today's RPAs typically weigh scatter dose, room geometry and footfall before requiring one. Ask your RPA: *"do you actually want a lamp on this room?"*

Wiring overview IF SPECIFIED



05 · HAND THIS PAGE TO YOUR IT

Computer *spec.*

The acquisition PC sits in the same room as the scanner and does the heavy lifting. Surgery PCs only review images — far less demanding.

- ★ **We recommend ordering your acquisition PC from us.** Our PCs are built specifically for the CBCT we supply — configured to Carestream's exact requirements, burned in, and network-ready on delivery. All support then sits with a single helpdesk: machine, software *and* PC on one number, with no diagnostic delays between your IT provider and ourselves. We do not mark up the hardware — reliable support is what matters most once you are scanning patients.

Acquisition PC — minimum specification

COMPONENT	SPEC
Operating system	Windows 11 Pro 64-bit (or Win 10 Pro 22H2 LTS)
Processor	Intel Core i5 (12th gen or newer) · 6+ cores
Memory	16 GB RAM (8 GB minimum, 16 GB recommended)
Storage	1 TB NVMe SSD
Graphics	NVIDIA GeForce 4 GB+ PCI-e · CUDA cores ≥ 800
Network	1 GbE on-board · optional Intel PRO 1GB NIC for clinical VLAN
Optical	DVD writer (for patient referrals on disc)

Monitors

25"+ HDMI minimum. Image review benefits from a **medical-grade** panel:

Medical-grade (DICOM-calibrated)	~ £4,000
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Philips near-medical-grade	~ £900
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Standard 25" 4K HDMI	£250-£400
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Surgery / review PCs

Lower spec is fine — the heavy lifting happens once at acquisition.

CPU	Any modern i3 / Ryzen 5
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RAM	8 GB
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GPU	Integrated graphics OK for review
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06 · THE LEGAL BIT, MADE PAINLESS

RPA, CEAT & QA.

Three things you legally need: a signed-off room plan, a critical exam, and ongoing testing. We do the heavy lifting on all of them.

A

Your RPA — sign-off before any work

Your Radiation Protection Adviser must approve the room plan **before** any building work starts. We draw the plans for you and submit on your behalf — most RPAs we've worked with sign off within 5 working days.

B

Critical Examination & Acceptance Test (CEAT)

A series of dose, scatter and beam-quality tests we carry out at install. It's our legal responsibility to certify the unit before you scan a single patient. You get a signed report.

C

Annual service & ongoing testing

Required to stay CQC and IRR17-compliant. Do your monthly QA and the Critical Exam drops to once every three years.

Annual electro-
mechanical service

£495–£595 + VAT — incl. firmware & software updates

Critical Exam (dose /
scatter)

£680 + VAT — once every 3 years *if monthly QA is logged*

Monthly QA testing

Free — we supply the tool. **Anyone** can do it (no radiography training needed)

Three-year Critical Exam interval. Provided monthly QA is logged consistently, the Critical Exam interval extends to once every three years. We schedule it alongside your annual service — one engineer visit, both compliance items completed.

07 · THE TRAINING DAY

Training *agenda.*

Training is the make-or-break stage of every install. Spend the prep time and your team will be confident scanning by lunch on day one.

Before training day — please prepare

- ☐ **Block out the diary**
A full half-day for the trainer + one nominated lead clinician + lead nurse.
- ☐ **Book a variety of patients**
2× OPG, 2× small-FOV CBCT, 2× full-FOV CBCT — across the day. Real patients rather than staff.
- ☐ **Identify your "champion"**
One person who'll own the machine for the first 3 months. Usually a senior nurse.
- ☐ **Install the viewer on review PCs**
We send the installer 2 weeks ahead — your IT can roll it out before training day.

By end of training day, your team will...

i

Operate the machine

Confident on positioning, FOV selection, exposure protocols.

ii

Position any patient

Including paediatric, edentulous, and wheelchair patients.

iii

Use the 3D viewer

Slice navigation, implant planning, nerve canal mapping.

iv

Hold a certificate

Every attendee receives a 360visualise training certificate for their CPD record.

08 · A NATURAL NEXT STEP

Now *report it.*

You have the scanner. The next step is reading the volumes confidently and writing GDC-defensible reports — for every patient, every time.

CBCT LEVEL 2 · REPORTING COURSE

Expert-led. Hands-on. Practice-ready.

Led by **Dr Ed Walker** — Consultant Dental & Maxillofacial Radiologist.
Twelve months of confident reporting in two structured sessions.

INVESTMENT

£595 + VAT

CPD

6+ hours

COHORT

Max 15



Scan to book

By the end of the course you will...

i

Justify every exposure

IRMER-compliant reasoning, FOV selection and dose justification — written in language a CQC inspector will accept.

ii

Read the whole volume

Systematic review of the entire dataset — not just the tooth that prompted the scan.

iii

Write structured reports

A repeatable template — clinical findings, incidental findings, recommendations.

iv

Know when to refer

Recognise findings outside your scope and escalate to a consultant radiologist confidently.

Programme

Day 1 · in person

Octagon House, West Yorkshire BD20 5LY · 9:00–17:00

Day 2 · Zoom follow-up

Cohort case-review session approx. 4 weeks later

Format

Lecture, hands-on dataset interpretation, structured-report writing workshops

09 · FROM SCAN TO SURGERY

Plan it. Print it. *Place it.*

Two days at our Yorkshire HQ. Plan a real case in SMOP, print your own surgical guide overnight, and place an implant on a model you will take home with you.

THE 360 IMPLANT ACADEMY · 2-DAY MASTERCLASS

A small-cohort programme for confident clinicians.

Trainers: **Ollie Ambridge**, **Cameron Kelly** (Ambridge Ceramics) and **Emma Downing** (Swissmeda). Hands-on, low-volume, every delegate plans & places.



Scan to book

INVESTMENT

£495 + VAT

CPD

12+ hours

COHORT

Max 16

INCLUDES

SMOP licence
worth £250

01 DAY 1, AM

Plan it.

SMOP planning workshop with Emma Downing – guide your real case from CBCT to fully-planned implant position.

02 DAY 1, PM

Print it.

Send your plan to print. Your surgical guide is fabricated overnight on-site, ready for day two.

03 DAY 2

Place it.

Guided implant placement on your printed model with Ollie Ambridge – full surgical workflow, take the model home.

What you take home

SMOP planning licence	12-month seat – worth £250, included in the course fee
Your printed surgical guide	From your own planned case – keep for clinical reference
Jaw model with placed implant	Sectional model showing your placed fixture – useful for patient consultations
CPD certificate	12+ hours · GDC outcomes A · C · D

10 · HAND TO YOUR PROJECT LEAD

Master *checklist.*

One page. Ticking these means your install will go on the day — not three weeks later.

4 weeks before

- ☐ Room plan signed off by RPA
- ☐ Lead lining ordered (if required)
- ☐ Acquisition PC ordered or confirmed
- ☐ Builder + electrician booked for the right week

Install week

- ☐ Room cleared & access route confirmed
- ☐ Acquisition PC built & on the network
- ☐ Patients booked for training day
- ☐ Champion + nurse blocked out

2 weeks before

- ☐ 16 A circuit run & isolator fitted
- ☐ Cat5e + bell wire pulled to base
- ☐ Warning lamps fitted outside doors
- ☐ Viewer software pushed to surgery PCs

Day of install

- ☐ CEAT carried out & certified ✓
- ☐ Hand-over walkthrough complete
- ☐ QA tool issued, monthly process agreed
- ☐ Training day booked in the diary

READY TO TALK SPECIFICS?

We'll come and look at your room. Free, no commitment.

A 90-minute site survey saves three weeks of building rework.

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