

• CONSTRUCTION · GUIDE

The skills matrix *for* *construction teams*

On a construction site, capability has two halves: can this person do the work, and are they certified and carded to be on site at all? A skills matrix built for construction tracks both, trade competence and the cards, tickets and inductions that gate site access, so the right people are on the right tasks, safely and compliantly.



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Reading time 12 min · **Method** Upleashed 0 to 5 capability framework · **Updated** May 2026

THE SHORT ANSWER

A construction skills matrix maps your crew against two things at once: their trade competence on each task, scored on a clear scale, and the certifications that govern site access, CSCS cards, plant tickets, SMSTS or SSSTS, and site inductions, with each shown as valid, expiring or expired. In short: **it shows who is competent, who is compliant, and who is genuinely site-ready today, so an expired card never becomes a site-access surprise.**

KEY TAKEAWAYS

- **Competence and compliance are different.** Being skilled at a trade and being carded to work on site are two separate things; the matrix tracks both.
- **No card, no site.** Most principal contractors require a valid CSCS card for site access, so an expired card stops a worker regardless of skill.
- **Track expiry, not just possession.** A certificate that has lapsed is a gap. The matrix must show validity dates, not a one-off tick.
- **Watch single-cover trades.** A critical trade or plant ticket held by one person is a coverage risk, just as in any team.
- **It is an audit and safety tool.** A current matrix proves to an HSE inspector or principal contractor that everyone on site is competent and compliant.

— START HERE

Construction capability has *two halves*

A skills matrix for construction does something most matrices do not: it tracks two distinct kinds of capability side by side. One is whether a worker can do the trade to standard. The other is whether they hold the valid cards, tickets and inductions that allow them on site at all. Both matter, and they are not the same.

Competence: can they do the work?

The first half is trade competence, scored just as on any skills matrix: can this person carry out groundworks, steel fixing, formwork or plant operation, and to what level, from learning under supervision through to expert who can lead and train. This is the **0 to 5 capability** half of the matrix, and it tells you who to put on which task, where you are thin on a trade, and who can supervise an apprentice.

Compliance: are they carded to be here?

The second half is certification, and in UK construction it is decisive. The **Construction Skills Certification Scheme (CSCS)** card proves a worker's competence and health-and-safety knowledge, and most principal contractors operate a strict "no card, no site" policy, checking cards at the gate. Add the management tickets (SMSTS for managers, SSSTS for supervisors), plant tickets such as CPCS, and site-specific inductions, and

you have a compliance layer that can stop a perfectly skilled worker at the gate if anything has lapsed.

Site-ready means both, today

The whole point of a construction matrix is the intersection: a worker is **site-ready only when they are both competent and compliant, right now**. A brilliant groundworker whose CSCS card expired last week is not site-ready; an apprentice with a valid trainee card is site-ready, under supervision. By tracking competence and live certification together, the matrix answers the question that actually matters at 7am on a Monday: who can I safely and lawfully put to work today?

— WHY IT MATTERS NOW

An expired card is a *locked gate*

In construction the stakes of an unseen gap are immediate and physical: a stopped worker, a failed audit, or worst of all an unsafe task carried out by someone not competent to do it. Tracking competence and compliance together is how you see all three coming.

1997

CSCS / CITB

the year CITB took over the CSCS scheme; after industry deaths, most contractors moved to a "100% carded" site policy.

8%

GARTNER, 2024

of organisations have reliable workforce skills data, so most sites track cards in scattered spreadsheets, if at all.

39%

WEF, 2025

of workers' core skills are expected to change by 2030, as methods, plant and regulations keep evolving.

The "no card, no site" reality means compliance is not paperwork you can catch up on later; it is the gate. A card that expires unnoticed turns a productive worker into a person who must be turned away, and a single-cover plant ticket that lapses can halt an operation outright. Layer on the safety duty, only competent people on safety-critical tasks, and the audit duty, proving all of it to a principal contractor or the HSE, and the case is clear. A construction skills matrix that tracks **competence and live**

certification together turns these from nasty surprises into managed, visible facts.

— WHAT IT SAFEGUARDS

Four things a construction matrix protects

On site, a skills matrix earns its keep by protecting four things that carry real cost, in money, in safety, and in the right to keep working.

PROTECTS 01

Site access & compliance

By tracking card and ticket validity, the matrix ensures everyone on site is carded and compliant, so no one is turned away at the gate and the "no card, no site" rule is never breached.

PROTECTS 02

Safety-critical competence

It confirms that only genuinely competent workers take on high-risk tasks, plant, working at height, confined spaces, the heart of site safety and your duty of care.

PROTECTS 03

Trade coverage

It shows whether each critical trade and plant ticket is held by enough of the crew, so a single absence or a lapsed ticket does not stop an operation.

PROTECTS 04

Audit & inspection readiness

A current matrix is the evidence a principal contractor or HSE inspector expects: who is competent, who is carded, and that every certificate is in date.

The thread connecting all four is that, in construction, **capability you cannot evidence is capability you cannot use**. A worker's skill counts for nothing at the gate without a valid card; a safe site cannot be proven without records; an operation is only as resilient as the depth of its certified cover. The matrix is the single place where competence and compliance meet, turning a pile of cards, tickets and training certificates into one clear, current answer to who can work, safely and lawfully, today.

— THE SCALE BEHIND THE SCORES

The 0 to 5 capability framework

The competence half of a construction matrix needs a clear scale. This framework, developed by Dr Alex J. Martin-Smith, supplies it for trade skills, while certifications sit alongside as a separate validity layer. Level 3, works unsupervised to standard, is the line that matters most on site.

-
- 0** **Not required for the role** EXCLUDED
- The trade or task is not part of this worker's role, for example plant operation for a steel fixer. Excluded from their score, not counted as a gap.
-
- 1** **In training / Apprentice** WEIGHTING 25%
- Learning the trade under supervision. Up to 75% trained and does not yet fully grasp the quality and safety requirements. Works only under direct supervision.
-
- 2** **Developing** WEIGHTING 50%
- More than 75% trained. Can carry out the task under normal conditions, but consistent quality is not yet evidenced, so work is checked and complex jobs supervised.
-
- 3** **Skilled** WEIGHTING 75% · WORKS UNSUPERVISED
- Fully trained, consistent quality and safe practice, works the trade unsupervised. The level that counts as genuine cover on site, typically matched by a skilled-worker card.
-
- 4** **Advanced / Supervisor** WEIGHTING 100%
- Prolonged expertise; works to a high standard, supervises and trains others on the trade. Often paired with an SSSTS supervisor ticket. Reconfirm if a skill goes unused.
-
- 5** **Strategic ownership / Manager** WEIGHTING 100%
- Sets method and standards, plans and runs the work across the site. Often paired with SMSTS and a manager-level card. The purple flag marks your site managers and lead trades.

Competence on the scale, certification alongside

Trade competence is scored 0 to 5 as above, and the weightings, Level 1 = 25%, 2 = 50%, 3 = 75%, 4 and 5 = 100%, with 0 excluded, roll into a capability figure. Certifications are tracked separately as a validity status, valid, expiring or expired, because a card is not a level: it is either in date or it is not. Site readiness needs both: the competence to do the task and every required certification valid.

A worked example. Why competence alone does not make someone site-ready:

```
Trade competence Groundworks 4 (advanced) → clearly  
skilled enough  
CSCS card expired → no site access under "no card, no  
site"  
site-ready = No, until the card is renewed – competence  
cannot override compliance.
```

— SEE IT ON A REAL CREW

Competence and compliance, *in one view*

Here is a six-person crew mapped the construction way: trade competence on the left as 0 to 5 levels, certifications in the middle as live validity status, and a site-ready gate on the right that combines the two. In one view, you see who can work today, who needs a renewal, and who is stopped at the gate.

	TRADE COMPETENCE (0-5)				CERTIFICATION (VALIDITY)			
	Groundworks	Steel fixing	Formwork	Plant op.	CSCS card	SMSTS / SSSTS	Site induction	Site ready?
Dave FOREMAN	4	3	4	2	Black valid	SMSTS valid	Valid	Yes
Liam GROUNDWORKER	4	2	3	1	Blue valid	SSSTS valid	Valid	Yes
Karol STEEL FIXER	2	5	3	1	Gold valid	-	Valid	Yes
Priya PLANT OPERATOR	1	1	1	4	CPCS valid	-	Expiring	Yes
Sean APPRENTICE	2	2	1	0	Red valid	-	Valid	Supervised
Tomas LABOURER	2	1	1	0	Expired	-	Required	No

■ valid · in date
 ■ expiring · renew now
 ■ expired / required · blocks access

 not applicable to role

1 worker stopped at the gate (Tomas, expired card), however able 1
induction expiring (Priya), and she is the only plant operator

Illustrative crew on the Upleashed 0 to 5 framework. Competence is scored 0 to 5; certifications show live validity; the gate combines both into site readiness.

WHAT THE SITE MANAGER READS HERE

- **Competence does not override compliance.** Tomas can labour competently, but his expired CSCS card means "no card, no site". He cannot work until it is renewed, the gate is absolute.
- **A renewal is coming due.** Priya's site induction is expiring. She is site-ready today, but it must be renewed before it lapses, and as the only plant operator, her availability is doubly critical.
- **The apprentice is rightly supervised.** Sean holds a valid trainee card and is still developing, so he is site-ready under supervision, exactly as a CSCS Red card intends.
- **Plant operation is single-cover.** Only Priya can operate plant to standard. If she is unavailable, or that induction lapses, the operation stops, the clearest cross-training and renewal priority on the crew.

— READY-TO-USE EXAMPLES

What to map on a construction matrix

A construction matrix should capture both halves of capability. Here are the categories to map, with examples and the watch-outs that matter

most on site, a starting point to tailor to your trades and contracts.

Category	Examples to map	Watch out for
Trade skills (0–5)	Groundworks, steel fixing, formwork, bricklaying, finishing	Scoring "trained" once instead of demonstrated, current competence
Plant & equipment tickets	CPCS or NPORS for excavators, dumpers, telehandlers, cranes	Letting a plant ticket lapse, halting an operation it gates
Safety cards (CSCS)	Card type and colour by role, with the underlying H&S test	Tracking that a card exists but not its expiry date
Management tickets	SMSTS for managers, SSSTS for supervisors, first aid, fire	Assuming a supervisor ticket never needs refreshing
Site inductions	A current induction for each site the worker operates on	One induction treated as covering every site; each is separate

The golden rule for construction is to track **validity, not just possession**. A certificate that has expired is a gap exactly as a missing skill is, and on a carded site it is a more immediate one. Map the trades that matter for your work, the tickets and cards each role requires, and a current induction per site, and keep every expiry date visible. As always, focus on the vital few so the matrix stays current, because a construction matrix that is out of date is worse than none: it can put an uncarded worker on site.

— AVOID THESE

Six mistakes on a construction matrix

MISTAKE 01

Tracking cards, not expiry

A card that exists but has lapsed is no card at all. Record validity dates, not a one-off tick that it was once held.

MISTAKE 02

Confusing skill with compliance

Being good at the trade does not grant site access. Competence and a valid card are separate; you need both.

MISTAKE 03

One induction for all sites

Each site needs its own induction. Treating one as covering every site leaves workers non-compliant at the gate.

MISTAKE 04

Ignoring single-cover tickets

A plant or trade ticket held by one person stops the job if they are out. Read coverage, and cross-train or recruit.

MISTAKE 05

Scoring trained, not competent

A completed course is not the same as safe, unsupervised practice. Score what a worker can actually do to standard.

MISTAKE 06

Letting the matrix go stale

On a carded site a stale matrix is dangerous; it can put an uncarded worker to work. Keep expiry dates live and reviewed.

— FROM SCATTERED CARDS TO ONE VIEW

The method is free. A ready-made matrix just makes site readiness *obvious*.

Everything here works in a blank spreadsheet, and that is a fine place to start. A purpose-built template just makes the construction view effortless: score trade competence on the 0 to 5 scale, record each certification with its expiry, and the matrix shows competence, compliance and coverage together, so expiring cards, single-cover tickets and who is site-ready today stand out before they become a problem at the gate.



The Advanced Excel Skills Matrix shows competence and coverage at a glance and tracks required levels, the basis for combining trade skill with certification validity, all on the same 0 to 5 framework used throughout this guide.

TRY IT FREE	MOST POPULAR	WHEN YOU ARE READY
<p>£0</p> <p>The online 5x5 builder maps a small crew in your browser, with no sign-up. A fast way to start.</p>	<p>£199</p> <p>The full Excel template: heat map, required levels, coverage and analytics, up to 30 people and 30 skills. One-off, yours forever.</p>	<p>£1</p> <p>Upgrade to PulseAI in your first year for a living, web and mobile version with AI skill suggestions and reminders.</p>

— COMMON QUESTIONS

Quick *answers*

Q What is a skills matrix for construction?

It is a grid that maps a crew against two things: their trade competence on each task, scored on a clear scale, and the certifications that govern site access, CSCS cards, plant tickets, SMSTS or SSSTS, and site inductions, shown as valid, expiring or expired. Together they tell you who is genuinely site-ready.

Q What is a CSCS card and why does it matter?

The Construction Skills Certification Scheme card proves a worker's competence and health-and-safety knowledge for UK construction sites. Holding one is not a legal requirement, but most principal contractors operate a "no card, no site" policy, so in practice a valid card is what gets a worker through the gate.

Q How is a construction matrix different from a normal one?

It tracks two kinds of capability at once. An ordinary matrix scores competence; a construction matrix adds a compliance layer of cards, tickets and inductions tracked by validity date. A worker is site-ready only when both are satisfied, so the matrix combines them into a single site-ready view.

Q What should I track for each worker?

Trade competence on the 0 to 5 scale for each relevant trade, plus every required certification with its expiry: the CSCS card and type, plant tickets such as CPCS, management tickets like SMSTS or SSSTS, and a current induction for each site. Track validity dates, not just whether something was once held.

Q Why track certificate expiry dates?

Because an expired certificate is a gap, and on a carded site an immediate one. A worker whose CSCS card or induction has lapsed cannot be on site, however skilled, so a matrix that records only that a card exists, not when it expires, will let a non-compliant worker slip through. Live expiry dates prevent that.

Q Do I need special software for a construction matrix?

No. A well-built spreadsheet that tracks competence and certificate expiry works well, and most teams should start there. Software helps when you want expiry reminders, multi-site induction tracking and instant site-ready reports across a large or fast-moving workforce, with everything updating automatically.

— ABOUT THE AUTHOR



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Alex is the creator of the Upleashed capability framework that powers Skills Matrix Template, the award-winning Excel skills matrix. A Chartered Manager with an MBA, an LLM and a doctorate in business administration, he has spent more than two decades helping operations, HR and quality teams turn capability from a gut feel into something they can measure, manage and prove.

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A stylized, handwritten signature in black ink that reads "Alex J. Martin-Smith".

Dr Alex J. Martin-Smith

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Know who is *site-ready*.

You now have the construction method. The quickest way to start is to list your trades and required cards this week, score competence on the 0 to 5 scale, and record every certificate with its expiry. The matrix will show you who can work, who needs a renewal, and who must wait at the gate.

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