SAMPLE REVIEW REPORT

# Medical Office Tower — CD Set Rev 2

84 doors · 112 devices · 6 documents · 342 pages reviewed against 64 failure-mode checks

**This is a demonstration report.** Every finding below is representative of issues SpecSentry catches on real Division 28 packages, drawn from a fictional project. Your report follows this exact format, against your sheets and spec sections.

| 20 | 3 | 6 | 16 | $85.9K |
|---|---|---|---|---|
| TOTAL FINDINGS | CRITICAL | HIGH | OPEN | COST EXPOSURE |

11 of 20 findings carry senior-engineer validation. Cost figures are order-of-magnitude rework estimates, not quotes.

## Documents reviewed

| | |
|---|---|
| **SE-101…103_Floor Plans.pdf** | Security floor plans — 3 sheets |
| **SE-501_Riser Diagram.pdf** | Access control riser |
| **SE-601_Device & Door Schedules.pdf** | 84 doors — 112 devices |
| **SE-701…702_Typical Details.pdf** | Wiring & mounting details |
| **Spec 28 13 00_Access Control.pdf** | Division 28 specification |
| **Spec 08 71 00_Door Hardware.pdf** | Hardware sets HW-01 — HW-14 |

## Findings by discipline

| Discipline | Findings | Est. impact |
|---|---|---|
| Code Compliance | 3 | ~$31.5K |
| Access Control | 5 | ~$30.4K |
| Coordination | 4 | ~$9.2K |
| Video | 3 | ~$5.2K |
| Power | 2 | ~$4K |
| Network | 2 | ~$4K |
| Intrusion | 1 | ~$1.6K |

## Findings — detail

Ordered by severity, then cost impact. "Ball in court" names the party who owns the resolution.

CRITICAL

## SS-001 — Delayed egress doors missing fire alarm release interface

**~$18K**
Open

Discipline: Code Compliance · Ball in court: Security Engineer · Code: IBC 1010.2.13 / NFPA 72 · ✓ Expert validated

**WHAT WE FOUND**

Doors 214 and 302 are scheduled with delayed egress locking hardware, but no fire alarm interface relay or release-on-alarm sequence is shown on the security or fire alarm drawings. Delayed egress locking systems must unlock on activation of the fire alarm or sprinkler system, and required signage is also not detailed.

**EVIDENCE**

[SE-201 p.1] [FA-102 p.3] [Spec 28 13 00 §2.7] [Door Schedule A-601]

**RECOMMENDED ACTION**

Add FACP relay interface to both openings, show release sequence in the operations matrix, and add code-required signage to the door elevation details. Coordinate with fire alarm contractor before submittal.

CRITICAL

## SS-002 — Electrified panic hardware with no power transfer specified

**~$12K**
Open

Discipline: Access Control · Ball in court: Door Hardware Supplier · ✓ Expert validated

**WHAT WE FOUND**

Eight openings carry electrified panic devices in hardware sets HW-07 and HW-12, but no electric power transfer (EPT) or transfer hinge appears in the sets. Power cannot reach the device across the door leaf - a classic field discovery that stops trim-out.

**EVIDENCE**

[Door Schedule A-601] [Spec 08 71 00 sets HW-07, HW-12] [SE-701 p.2]

**RECOMMENDED ACTION**

Add EPT (e.g., EPT-10) to both hardware sets and confirm frame prep with the hollow metal supplier. Verify wire count supports device monitoring.

CRITICAL

## SS-003 — Mag-locked stair door without free mechanical egress

**~$9.5K**
In Review

Discipline: Code Compliance · Ball in court: Architect · Code: IBC 1010.2.14 · ✓ Expert validated

**WHAT WE FOUND**

Stair 2 at Level 3 shows a maglock with REX motion and push-to-exit button, but the egress side must allow free mechanical egress regardless of lock power state. As drawn, this will fail AHJ inspection.

**EVIDENCE**

[SE-203 p.1] [A-421]

**RECOMMENDED ACTION**

Convert to fail-safe electrified latch retraction or add compliant sensor-release configuration with required signage and FA tie-in; confirm approach with AHJ early.

HIGH

## SS-004 — Controller over capacity: 10 doors assigned to 8-door node

~$9K
Open

Discipline: Access Control · Ball in court: Security Integrator · ✓ Expert validated

**WHAT WE FOUND**

Panel SEC-P3 is an 8-door controller on the riser, but the device schedule assigns it 10 controlled openings. Two doors have no home. Discovered now, it is a submittal edit; discovered in the field, it is a change order and a schedule slip.

**EVIDENCE**

[SE-501 p.2] [SE-601 p.4]

**RECOMMENDED ACTION**

Add a door expansion module or rebalance doors 118 and 121 to SEC-P2, which has spare capacity. Update riser and panel schedule together.

HIGH

## SS-005 — Spec requires OSDP; drawings detail 6-conductor Wiegand wiring

~$7K
Open

Discipline: Access Control · Ball in court: Security Engineer · ✓ Expert validated

**WHAT WE FOUND**

Specification 28 13 00 §2.3 mandates OSDP v2 reader communication, but typical detail SE-701 shows 6-conductor Wiegand wiring and the reader schedule lists a Wiegand-only model. Spec and drawings cannot both be met as issued.

**EVIDENCE**

[Spec 28 13 00 §2.3] [SE-701 p.1] [Reader Schedule SE-601 p.6]

**RECOMMENDED ACTION**

Revise the typical detail to 2-conductor shielded RS-485 plus power, and update the reader model to an OSDP-capable unit. Confirm controller firmware supports secure channel.

HIGH

## SS-007 — PoE budget exceeded at IDF-2

~$4K
Open

Discipline: Network · Ball in court: Electrical Engineer · ✓ Expert validated

**WHAT WE FOUND**

The 24-port switch scheduled for IDF-2 carries a 370W PoE budget. Connected security load (14 cameras incl. 4 PTZ at PoE+, 3 door controllers, 2 intercoms) totals ~412W. Cameras will brown-out under load.

**EVIDENCE**

[SE-503 p.1] [T-401]

**RECOMMENDED ACTION**

Specify a 740W PoE+ switch or split the PTZ cameras to a second switch. Recheck after camera submittal, since actual draw varies by model.

HIGH

## SS-009 — Reader installed on wall scheduled for Phase 2 demolition

**~$3.2K**
Open

Discipline: Coordination · Ball in court: Architect · ✓ Expert validated

**WHAT WE FOUND**
Door 118's card reader and rough-in land on a partition flagged for demolition in the Phase 2 renovation scope. The device would be installed and then demolished within the same contract.

**EVIDENCE**
[SE-101 p.1] [A-111 Phasing Plan]

**RECOMMENDED ACTION**
Shift the opening's access control rough-in to the permanent corridor wall, or defer this opening to Phase 2 scope with temporary keying.

HIGH

## SS-006 — Lock power supply undersized for connected load

**~$2.5K**
Open

Discipline: Power · Ball in court: Security Integrator · Code: UL 294 / NFPA 72 (standby where FA-integrated)

**WHAT WE FOUND**
PSU-2 is scheduled at 12VDC/4A serving 11 electrified openings. Calculated steady-state draw is 4.8A with inrush exceeding 5.6A. No battery standby calculation is provided.

**EVIDENCE**
[SE-502 p.1] [SE-601 p.5]

**RECOMMENDED ACTION**
Upsize to a 10A supervised supply, provide load and battery calcs on the submittal, and fuse each lock circuit individually.

HIGH

## SS-008 — Camera FOV blocked by structural column at loading dock

**~$1.8K**
Open

Discipline: Video · Ball in court: Security Engineer

**WHAT WE FOUND**
Camera C-12's indicated field of view is obstructed by column line S-4 added in the current structural revision. The dock door and approach lane - the stated coverage intent - are not visible.

**EVIDENCE**
[SE-301 p.2] [S-201 Rev 3]

**RECOMMENDED ACTION**
Relocate C-12 approximately 8 ft west to the adjacent joist bay, or add a second camera to maintain both approach and door coverage.

MEDIUM

## SS-016 — Elevator cab reader shown, but no traveling cable conductors coordinated

**~$6K**
Open

Discipline: Coordination · Ball in court: GC · Code: ASME A17.1 (FEO interaction) · ✓ Expert validated

**WHAT WE FOUND**
The spec calls for card readers in elevator cabs with floor-select control, but the elevator specification's traveling cable schedule shows no spare shielded conductors and no security interface in the machine room.

**EVIDENCE**
[Spec 28 13 00 §2.9] [Spec 14 21 00]

**RECOMMENDED ACTION**
Issue coordination RFI: add shielded pairs to the traveling cable, define the relay interface in the machine room, and confirm fire service override behavior takes precedence.

MEDIUM

## SS-010 — Card readers mounted at 52 in. AFF exceed ADA reach range

**~$4K**
Open

Discipline: Code Compliance · Ball in court: Architect · Code: ICC A117.1 §308 / ADA 2010 §308 · ✓ Expert validated

**WHAT WE FOUND**
Mounting detail SE-702 places readers at 52 in. AFF. For a side reach over an obstruction - and per common AHJ interpretation for unobstructed side reach - operable parts must fall within 15-48 in. Fourteen openings reference this detail.

**EVIDENCE**
[SE-702 p.1] [ICC A117.1 §308]

**RECOMMENDED ACTION**
Revise the typical detail to 44-48 in. AFF to centerline of reader, and confirm clear floor space at each opening.

MEDIUM

## SS-014 — No conduit path shown for exterior parapet cameras

**~$2.8K**
Open

Discipline: Video · Ball in court: Electrical Engineer

**WHAT WE FOUND**
Four exterior cameras mount at the parapet, but neither the security nor electrical drawings show a conduit path, roof penetration detail, or junction location. Exposed exterior cable will not survive review or weather.

**EVIDENCE**
[SE-302 p.1] [E-501]

**RECOMMENDED ACTION**
Add conduit routing and a sealed penetration detail coordinated with roofing; verify warranty impact of penetrations with the GC.

MEDIUM

## SS-011 — Door position switches missing from monitored openings

~$2.4K

Open

Discipline: Access Control · Ball in court: Door Hardware Supplier

**WHAT WE FOUND**

Six openings are flagged 'monitored' in the security operations matrix, but their hardware sets contain no door position switch and the frames show no DPS prep.

**EVIDENCE**

[SE-601 Matrix p.7] [Spec 08 71 00]

**RECOMMENDED ACTION**

Add concealed DPS to the six affected sets and coordinate frame prep; update the point count on panels SEC-P1/P2.

MEDIUM

## SS-015 — Glassbreak coverage missing at ground-floor curtain wall

~$1.6K

Open

Discipline: Intrusion · Ball in court: Security Engineer

**WHAT WE FOUND**

Spec 28 16 00 requires perimeter glassbreak coverage at grade-level glazing. The north curtain wall (gridlines 1-4) has no glassbreak or shock sensors shown.

**EVIDENCE**

[SE-102 p.1] [Spec 28 16 00 §2.2]

**RECOMMENDED ACTION**

Add acoustic glassbreak coverage for the north elevation or document owner-approved exception; update zone schedule.

MEDIUM

## SS-013 — No 120VAC circuit shown at security panel location

~$1.5K

Open

Discipline: Power · Ball in court: Electrical Engineer · Code: NEC 725 (Class 2 separation at panel)

**WHAT WE FOUND**

Security equipment room 1152 shows head-end panels SEC-P1 and PSU-1/2, but the electrical power plan provides no dedicated receptacle or circuit at that wall.

**EVIDENCE**

[SE-401 p.1] [E-301]

**RECOMMENDED ACTION**

Request a dedicated 20A circuit at the panel wall via RFI to the EE; confirm UPS requirements while the circuit is being added.

MEDIUM

## SS-012 — Riser and floor plans disagree on device count (96 vs 112)

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In Review

Discipline: Coordination · Ball in court: Security Engineer · ✓ Expert validated

**WHAT WE FOUND**
The riser diagram totals 96 addressable devices; the floor plans place 112. Sixteen devices - mostly Level 3 REX and DPS points - never made it to the riser, so panel point capacity and wire runs are understated.

**EVIDENCE**
[SE-501 p.1] [SE-101-103]

**RECOMMENDED ACTION**
Reconcile the riser against the plans, recount panel inputs, and reissue. Verify SEC-P1 still has spare points after correction.

LOW

## SS-018 — Fixed 2.8mm lens scheduled for 90-ft corridor view

~$0.6K
Open

Discipline: Video · Ball in court: Security Engineer

**WHAT WE FOUND**
Camera C-31 covers a long corridor but is scheduled with a 2.8mm fixed lens - target identification at the far end will not meet the stated pixels-per-foot intent.

**EVIDENCE**
[SE-601 Camera Schedule p.8] [SE-301 p.1]

**RECOMMENDED ACTION**
Substitute a varifocal (e.g., 9-22mm) unit or add a second camera midway; validate PPF against the owner's design intent.

LOW

## SS-017 — Specified reader model discontinued by manufacturer

—
Resolved

Discipline: Access Control · Ball in court: Security Integrator · ✓ Expert validated

**WHAT WE FOUND**
The scheduled reader model was discontinued last year. An equivalent current-generation OSDP model exists with the same footprint.

**EVIDENCE**
[Spec 28 13 00 §2.3]

**RECOMMENDED ACTION**
Submit the current equivalent as an 'or-equal' with cut sheets; no wiring change required.

LOW

## SS-019 — No labeling standard specified for security cabling

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Open

Discipline: Network · Ball in court: Security Engineer

**WHAT WE FOUND**
Division 28 contains no cable labeling/identification standard, which historically produces unlabeled head-end rats' nests and slow commissioning.

**EVIDENCE**
[Spec 28 05 53 (absent)]

**RECOMMENDED ACTION**
Add a 28 05 53 identification section referencing TIA-606 labeling with door/device IDs matching the schedule.

LOW

### SS-020 — Symbol legend missing three device types used on plans

—

Dismissed

Discipline: Coordination · Ball in court: Security Engineer

**WHAT WE FOUND**

Intercom, duress button, and overhead-door contact symbols appear on plans but are absent from the legend on SE-001.

**EVIDENCE**

[SE-001] [SE-101-103]

**RECOMMENDED ACTION**

Update the legend at next issuance. (Dismissed: design team already tracking for the CD reissue.)

## How to read this report

**Severity** reflects consequence in the field, not effort to fix. Critical findings are those that fail inspection, defeat life safety, or stop trim-out. **Cost exposure** is an order-of-magnitude estimate of rework if the issue reaches construction — useful for triage, not for pricing a change order. **Expert validated** means a senior commissioning engineer independently confirmed the finding against the cited evidence before it appeared here.

Questions on any finding, or want this run against your package? info@kryossecuritygroup.com · specsentry.netlify.app