

BER4 · WP3 · DIGITAL SIMULATION TOOLKIT

Site Entry Process, Entry Techniques, Support Systems



21-step sequence	Phased search		Entry selector	Shoring logic		Command reporting
FLOW1 21-Step Strip	GAME1 Missing Step	GATE1 Readiness Gate	MAP1 Layout Board	SEARCH1 Search Methods	DRILL1 Silence Drill	
TECH1 Tech Match	ENTRY1 Entry Matrix	CARDS1 Risk Cards	SHORE1 Support Match	BUILD1 Crib Patterns	COMM1 Relay Chain	
FORM1 Doc Pack	SIM1 Video Module	OBS1 Dashboard	AUDIT1 Completeness	EXIT1 Passport	FAC Facilitator Guide	

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MAP · Digital Simulation Toolkit Map

This resource converts the training module into visual, decision-focused activities. The central method is one fixed digital video simulation. Practical entry, cutting, lifting, and shoring work must follow certified field procedures and competent supervision.

Module Code & Title	Activity Description & Objective
FLOW1 21-Step Entry Sequence	Reconstruct the complete site-entry chain without skipping steps.
GAME1 Missing Step Hunt	Find missing or misplaced steps in a deliberately broken sequence.
GATE1 Entry Readiness Gate	Check coordinates, structural review, HAZMAT, cordon, routes, signals, PPE.
MAP1 Work Area Layout Board	Plot cordon, entry/exit, two assembly areas, escape route, command point, sectors.
SEARCH1 Search Method Selector	Select visual, voice/acoustic, K9, or technical search from scenario clues.
DRILL1 Voice Search Silence Drill	Practice the call-silence-listen-confirm sequence at tabletop level.
TECH1 Technology Match Cards	Match seismic/acoustic sensors, search cameras, sound-isolation tools.
ENTRY1 Entry Method Decision Matrix	Compare side, top, bottom entry, and floor lifting hazards & requirements.
CARDS1 Entry Risk Scenario Cards	Spot the risk that should pause, stop, or redirect the operational plan.
SHORE1 Support System Match	Match crib stack, plastic, mechanical, hydraulic, and jack support systems.
BUILD1 Crib Stack Pattern Board	Recognize intended square cross-stack concept from visual patterns.
COMM1 Notification Chain Relay	Rebuild Squad Personnel → Squad Leader → Task Force Leader → Team Leader → OSOCC.
FORM1 Work Area Documentation	Use triage, casualty extrication, and work-area forms as accountability set.
SIM1 Interactive Video Module	Apartment Block Delta - Digital simulation video (Replaces rounds SIM1-A..F).
OBS1 Sequence & Safety Dashboard	Observe compliance with order, reporting, search escalation, stop-work logic.
AUDIT1 21-Step Completeness Audit	Check whether the whole operational chain has been covered.
EXIT1 Entry Readiness Passport	Individual transfer, key learnings, and personal reflection card.
FAC Facilitator Guide	Run activities visually and keep live technical practice outside tabletop exercise.

FLOW1 · 21-Step Entry Sequence Strip

Reconstruct the complete site-entry chain without skipping steps.

STEP 1 Coordinate & address confirmation	STEP 2 Structural engineer visual inspection	STEP 3 HAZMAT control
STEP 4 Establish work area	STEP 5 Hasty/rapid search (ASR3)	STEP 6 Building sectorization
STEP 7 Report search results	STEP 8 Open work-area triage forms	STEP 9 Live evidence → rescue decision
STEP 10 Voice/acoustic search	STEP 11 Technical search	STEP 12 Prepare rescue plan
STEP 13 Stop operation for unexpected risk	STEP 14 Notification chain relay	STEP 15 Logistical support request
STEP 16 First aid application	STEP 17 Extrication and handover	STEP 18 Casualty extrication form
STEP 19 Complete work-area form	STEP 20 Additional live scan	STEP 21 Report result to Team Leader

GAME1 · Missing Step Hunt

Find missing or misplaced steps in a deliberately broken sequence.

Broken Sequence Log:

1. Coordinate & address confirmation → 3. HAZMAT control → 4. Establish work area → 6. Sectorization → 5. Hasty search (ASR3) → 8. Open triage forms → 7. Report search results → 10. Voice search → 12. Prepare rescue plan → 11. Technical search → 13. Stop operation for unexpected risk → 15. Logistical request → 17. Extrication → 19. Complete work-area form → 21. Report to Team Leader.

Task: Circle what is out of order and write the missing steps in the sequence.

GATE1 · Entry Readiness Gate

Check coordinates, structural review, HAZMAT, cordon, routes, signals, and PPE before entry.

Checklist Parameter	Status Verification
■ Coordinates confirmed	[GO] [HOLD]
■ Structural visual assessment complete	[GO] [HOLD]
■ HAZMAT status checked	[GO] [HOLD]
■ Safety cordon established	[GO] [HOLD]
■ Entry and exit points known	[GO] [HOLD]
■ Assembly areas identified	[GO] [HOLD]
■ Escape route briefed	[GO] [HOLD]
■ Signals reviewed	[GO] [HOLD]
■ PPE checked	[GO] [HOLD]

MAP1 · Work Area Layout Board

Plot cordon, entry/exit, two assembly areas, escape route, command point, and search sectors.

CORDON Plot position on grid	ENTRY Plot position on grid	EXIT Plot position on grid
ASSEMBLY 1 Plot position on grid	ASSEMBLY 2 Plot position on grid	ESCAPE Plot position on grid
COMMAND Plot position on grid	SECTOR A Plot position on grid	SECTOR B Plot position on grid

SEARCH1 · Search Method Selector

Select visual, voice/acoustic, K9, or technical search from scenario clues.

Search Method	Operational Characteristics & Best Use
Physical / Visual	Fastest, least resource-intensive; look for exposed or easily accessible casualties.
Voice / Acoustic	Use the standard call, then full silence and careful listening.
K9 Rescue Dogs	Useful when voice and visual search are inconclusive or casualties cannot respond.
Technical Devices	Use seismic/acoustic sensors, search cameras, or sound-isolation equipment.



DRILL1 · Voice Search Silence Drill

Practice the call-silence-listen-confirm sequence at tabletop level.

1. CALL	2. SILENCE	3. LISTEN	4. CONFIRM
'Rescue Team Here, Can You Hear Us?'	Complete team silence & quiet zone	Careful acoustic check for tapping/shouts	Cross-verify location & log coordinates

TECH1 · Search Technology Match Cards

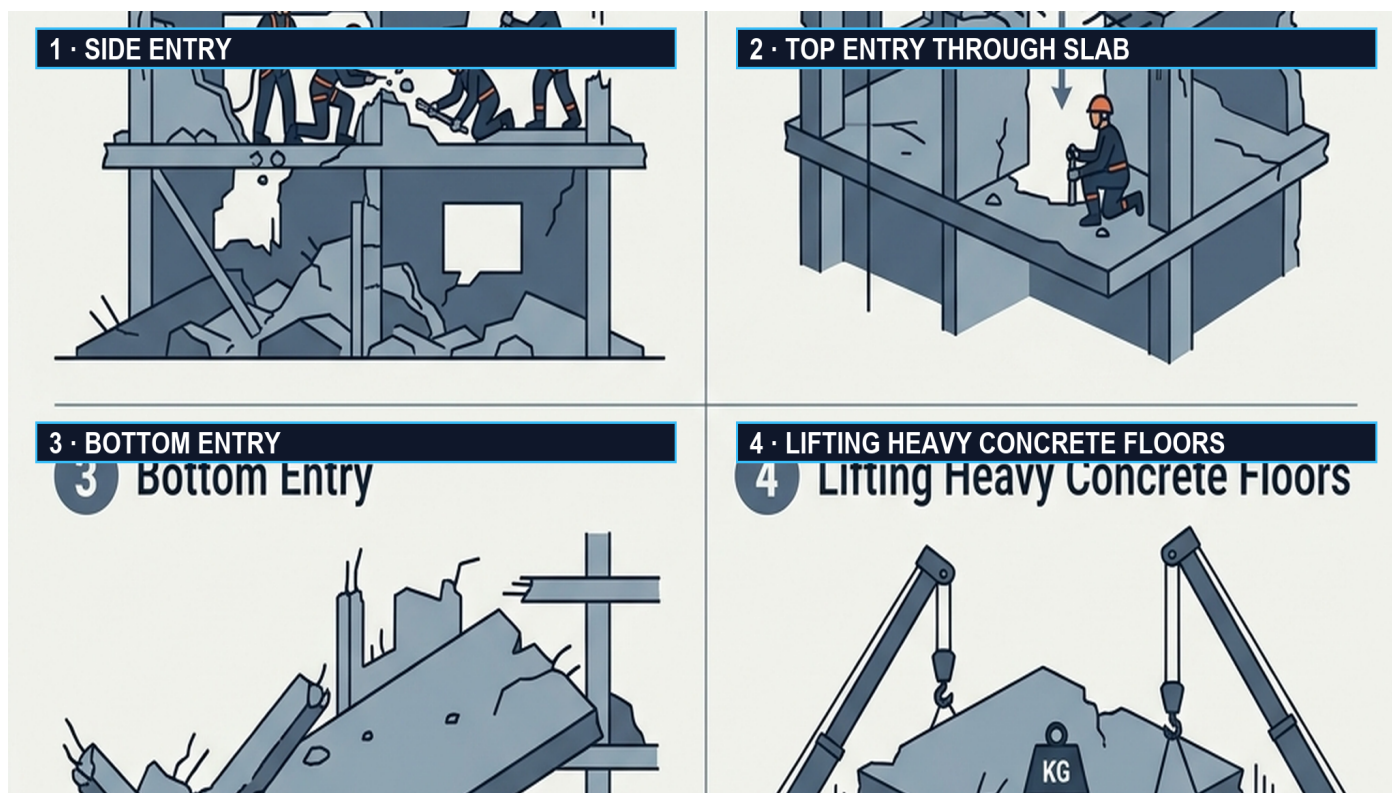
Match seismic/acoustic sensors, search cameras, and sound-isolation tools to needs.

Equipment Category	Operational Function & Primary Capability
Seismic / Acoustic Sensors	Detect vibration and faint ground/structural sound signals.
Search Camera Probe	Visual check through small openings, voids, and boreholes.
Sound Isolation System	Filter environmental background noise to enhance faint voice listening.

ENTRY1 · Entry Method Decision Matrix

Compare side, top, bottom entry, and floor lifting.

Method	Best Use Case	Main Caution & Risk	Decision
Side entry	Good for galleries and void access.	Risk to load-bearing elements; ground stability matters.	☐ GO ☐ HOLD
Top entry	Useful when casualty location is precise.	Watch slope/sliding and fall hazards.	☐ GO ☐ HOLD
Bottom entry	Used when side/top routes are long or risky.	Deep, slow, high collapse risk; ventilation & comms critical.	☐ GO ☐ HOLD
Lifting floors	Can save time in large operations.	Requires machine-operator coordination & underside checks.	☐ GO ☐ HOLD



CARDS1 · Entry Risk Scenario Cards

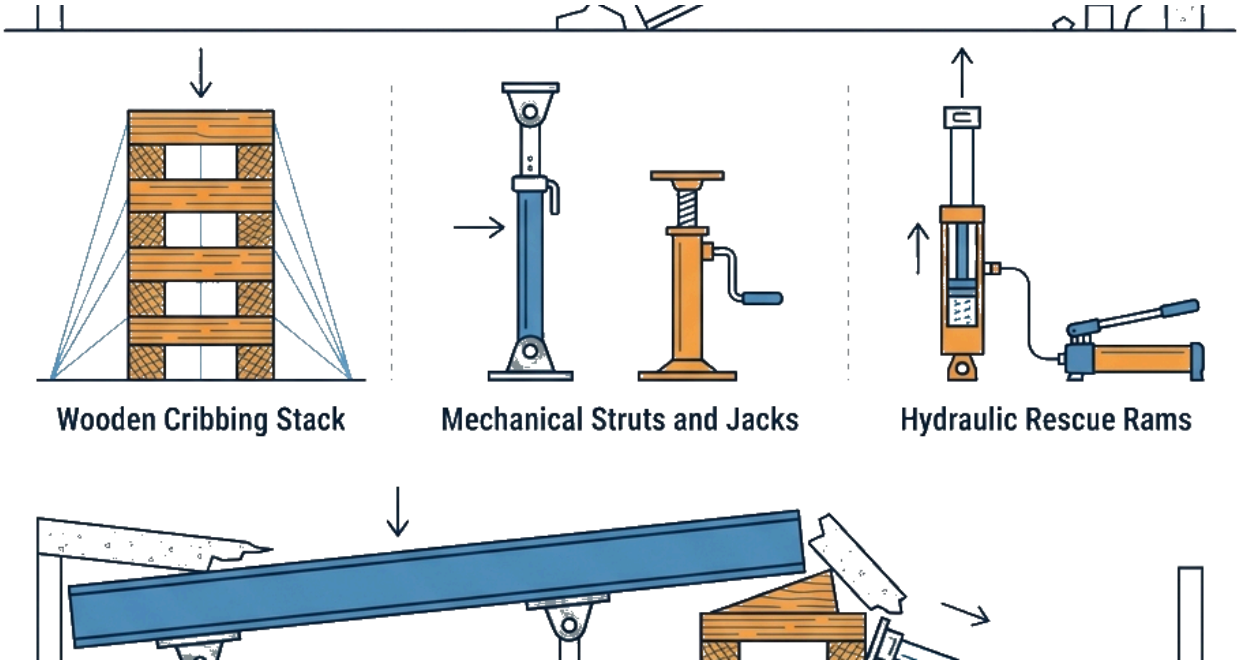
Spot the risk that should pause, stop, or redirect the plan.

Aftershock warning ☐ CONTINUE ☐ PAUSE ☐ STOP	Gas / electrical line hazard ☐ CONTINUE ☐ PAUSE ☐ STOP
Inclined debris instability ☐ CONTINUE ☐ PAUSE ☐ STOP	Unknown underside void ☐ CONTINUE ☐ PAUSE ☐ STOP
Poor ventilation / toxics ☐ CONTINUE ☐ PAUSE ☐ STOP	Loss of communication ☐ CONTINUE ☐ PAUSE ☐ STOP

SHORE1 · Support System Match

Match crib stack, plastic/polyurethane, mechanical, hydraulic, and jack systems.

Support System	Type	Primary Operational Application
Crib stack	Improvised	Large loads under columns, beams, and heavy concrete ceilings.
Plastic / polyurethane	Ready-made	Light, portable, narrow-space / under-vehicle support.
Mechanical strut	Ready-made	Adjustable column / beam support and trench stabilization.
Hydraulic strut	Ready-made	Heavy lifting and longer-duration stabilization operations.
Jack system	Auxiliary	Heavy mass lifting; capacity varies by model.



BUILD1 · Crib Stack Pattern Board

Recognize the intended square cross-stack concept from visual patterns.

Pattern A: Box Cribbing (2x2) ■ Select	Pattern B: Solid Stack (3x3) ■ Select	Pattern C: Parallelogram Stack ■ Select
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COMM1 · Notification Chain Relay

Rebuild Squad Personnel → Squad Leader → Task Force Leader → Team Leader → OSOCC.

Step	Role Title	Relay Responsibility
1	Squad Personnel	Initial hazard discovery & field observations
2	Squad Leader	Field evaluation & tactical decision making
3	Task Force Leader	Sector coordination & resource allocation
4	Team Leader	Overall operational command & strategic reporting
5	OSOCC	On-Site Operations Coordination Centre integration



FORM1 · Work Area Documentation Pack

Use triage, casualty extrication, and work-area forms as an accountability set.

Work Area Triage Form Time: _____ Sector: _____ Lead: _____ Key Findings: _____	Casualty Extrication Form Time: _____ Sector: _____ Lead: _____ Key Findings: _____
Work Area Form Time: _____ Sector: _____ Lead: _____ Key Findings: _____	Final Result Report Time: _____ Sector: _____ Lead: _____ Key Findings: _____

SIM1 · Apartment Block Delta - Interactive Video Simulation

UPGRADE NOTICE: The 5-round tabletop decision text (SIM1-A through SIM1-F) has been upgraded into an interactive digital video simulation. Click the video frame below or use the button to launch the simulation directly from the server.

Scenario Overview: A five-storey reinforced-concrete apartment block has partially collapsed after an earthquake. The team receives coordinates, reaches the site, and must follow the 21-step entry sequence while incomplete information, suspected survivors, and changing hazards (gas leak, leaning slab, aftershocks) appear in real time.



■ [CLICK HERE TO WATCH THE SIM1 VIDEO SIMULATION](http://disastersimulation.beready4life.com/video/BeR4_Site_Entry_Techniques_Support_Systems_Toolkit_EN.mp4)

Direct Video Link: http://disastersimulation.beready4life.com/video/BeR4_Site_Entry_Techniques_Support_Systems_Toolkit_EN.mp4

OBS1 · Sequence & Safety Dashboard

Observe compliance with order, reporting, search escalation, and stop-work logic.

Sequence followed in strict order [] YES [] NO [] PARTIAL	No entry before safety assessment [] YES [] NO [] PARTIAL	Search escalated logically [] YES [] NO [] PARTIAL
Sectorization used properly [] YES [] NO [] PARTIAL	Escape route considered & clear [] YES [] NO [] PARTIAL	Stop-work authority respected [] YES [] NO [] PARTIAL
Notification chain used correctly [] YES [] NO [] PARTIAL	Forms completed accurately [] YES [] NO [] PARTIAL	Second live scan completed [] YES [] NO [] PARTIAL

AUDIT1 · 21-Step Completeness Audit

Check whether the whole operational chain has been covered.

■ 1. Coordinate/address	■ 2. Structural assessment	■ 3. HAZMAT status
■ 4. Work area & cordon	■ 5. ASR3 Hasty search	■ 6. Sectorization
■ 7. Search report	■ 8. Triage form	■ 9. Live evidence decision
■ 10. Voice search	■ 11. Technical search	■ 12. Rescue plan
■ 13. Unexpected-risk stop	■ 14. Notification chain	■ 15. Logistics request
■ 16. First aid application	■ 17. Extrication/handover	■ 18. Casualty form
■ 19. Work-area form	■ 20. Additional live scan	■ 21. Final report

EXIT1 · Entry Readiness Passport

Individual transfer and reflection card.

1. One step I am most likely to forget during site entry:

2. One search-method decision I understand better now:

3. One entry risk that should immediately stop work:

4. One support-system concept I can now confidently identify:

5. One reporting habit I will carry into future exercises:

FAC · Facilitator Guide

Run the activities visually and keep live technical practice outside the tabletop exercise.

1. Use printed cards rather than lecture-heavy delivery.

2. Keep the 21-step order fixed throughout the simulation.

3. Let teams move route markers and sector labels on the board.

4. Treat entry and shoring as tabletop decisions, not practical certification.

5. Use the debrief to connect each decision back to the module sequence.



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