CONSTRUCK SLOPE ROCK PANELS

Rigid Panel Containment System for Fractured and High-Risk Rock Slopes



CST-RPN-BRO-00017
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CONSTRUCK SYSTEMS & TECHNOLOGY

Research and Development | Design | Manufacturing | Geotechnics

ConstruckSlope RockPanel is an anchored rock-face containment system designed for fractured, weathered, and high-risk rock slopes where conventional loose drapery may not provide enough surface restraint. The system combines high-strength RockPanel units, steel cable continuity, and ConstruckAnchor rockbolts to hold unstable surface blocks close to the rock face, distribute loads between anchors, and reduce the risk of rockfall onto roads, railways, utilities, and critical infrastructure.

Unlike ordinary mesh that may sag or balloon on irregular rock faces, RockPanel creates a tighter, more controlled containment surface. It is designed for slopes where face stabilization, source control, and long-term infrastructure protection are required.



Rigid rock-face containment

High-strength RockPanel units restrain fractured and loose rock blocks at the source, reducing movement before detachment occurs.

Anchored load transfer

Rockbolts and anchor plates transfer containment forces from the panel system into competent rock behind the unstable surface.

Cable-linked continuity

Perimeter and linking cables connect panels across the slope, improving load sharing and reducing local overstress.

SPaaP® — Slope Protection as a Product

A matched, factory-specified rock-slope protection kit for repeatable quality, faster installation, and clearer responsibility.

Where it is used

- Fractured, jointed, and weathered rock slopes where surface blocks require active containment and global stability is generally adequate.
- Road and rail cut slopes, portal approaches, mountain corridors, utility corridors, and industrial access roads exposed to rockfall risk.
- Difficult-access slopes where modular installation is preferred over heavy concrete works or extensive formwork.

What problems it solves

- Rock blocks detaching from fractured faces and falling onto carriageways or infrastructure.
- Ballooning, sagging, or poor contact from conventional drapery on rough rock surfaces.
- Local instability caused by weathering, open joints, rainfall, vibration, and progressive loosening.
- Traffic disruption and safety risks caused by reactive scaling or repeated maintenance.

System, Components & Benefits



Construck RockPanel



Rock bolts (3–6 m) with eye nuts



Wire Rope



Fixing & joint accessories

Benefits at a glance

Source control

Restrains fractured rock at the face before blocks detach and fall.

Low deformation

Provides tighter surface restraint than ordinary loose drapery systems.

Load sharing

Cables and panels distribute localized rock movement across multiple anchors.

Terrain adaptable

Modular panels can be arranged to suit irregular, steep, and difficult rock faces.

Corrosion-smart

Coated steel and stainless hardware options can be selected for aggressive environments.

Faster installation

Modular components reduce heavy plant needs and simplify works near live traffic.

More than just Erosion Control - A SPaaP Specialty, Fully Loaded with Engineering Features



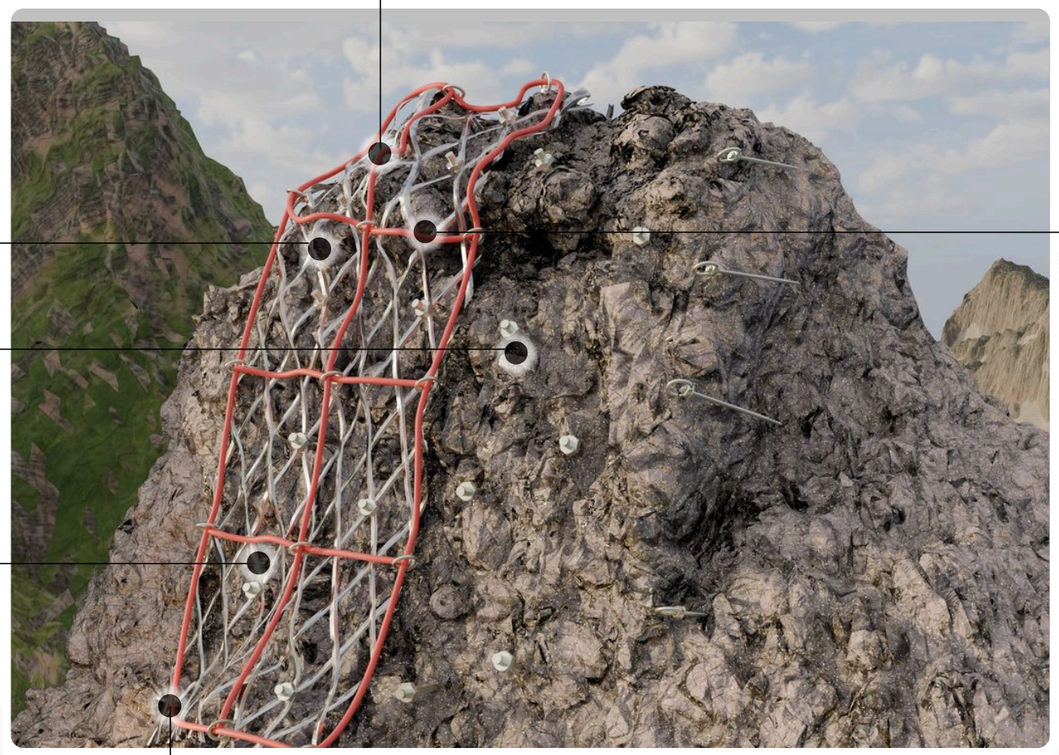
RockPanel Containment Surface

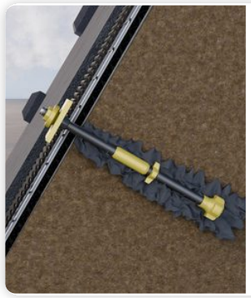
The RockPanel surface unit forms a controlled containment layer over fractured rock. It holds unstable blocks close to the face and reduces the likelihood of progressive loosening or detachment.



Cable-Linked Load Distribution

Perimeter and linking cables connect the RockPanel system across the slope face. This helps distribute localized movement to adjacent anchors and improves system-wide restraint.





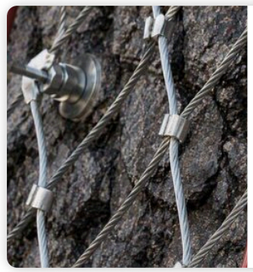
Deep Stability with Rock Bolts and Anchors

Rock bolts and anchors form the structural backbone of our anchored systems—transferring loads deep into stable ground to counteract slope movement. Each system is engineered for site-specific forces, ensuring long-term slope stability, resistance to deep-seated failure, and enhanced safety in challenging geologies.



Fractured Rock Block Control

The system is designed for jointed and weathered rock where individual blocks may loosen under rainfall, vibration, thermal cycles, or long-term weathering.



Corrosion-Smart

Component coatings and stainless hardware options may be selected for coastal, wadi, industrial, or high-exposure environments to improve long-term durability.



Edge Termination and Continuity

Edge Termination and Continuity
Edge cables and fixing accessories provide secure termination at panel boundaries, helping maintain continuity and reducing weak points along the protected area.





Performance, SPaaP & Spec Snapshot

How RockPanel changes rock-face containment and slope safety

Containment + Load Transfer + Continuity

RockPanel restrains fractured surface blocks, cables distribute forces across the system, and rockbolts transfer loads into competent rock.

Source-Control philosophy

The system reduces rockfall risk at the origin by securing unstable rock before detachment, rather than relying only on catchment below the slope.

Straight-from-factory quality

Matched panels, anchors, cables, plates, and accessories create a repeatable system with simpler inspection, QA, and installation control.

SPaaP — Slope Protection as a Product

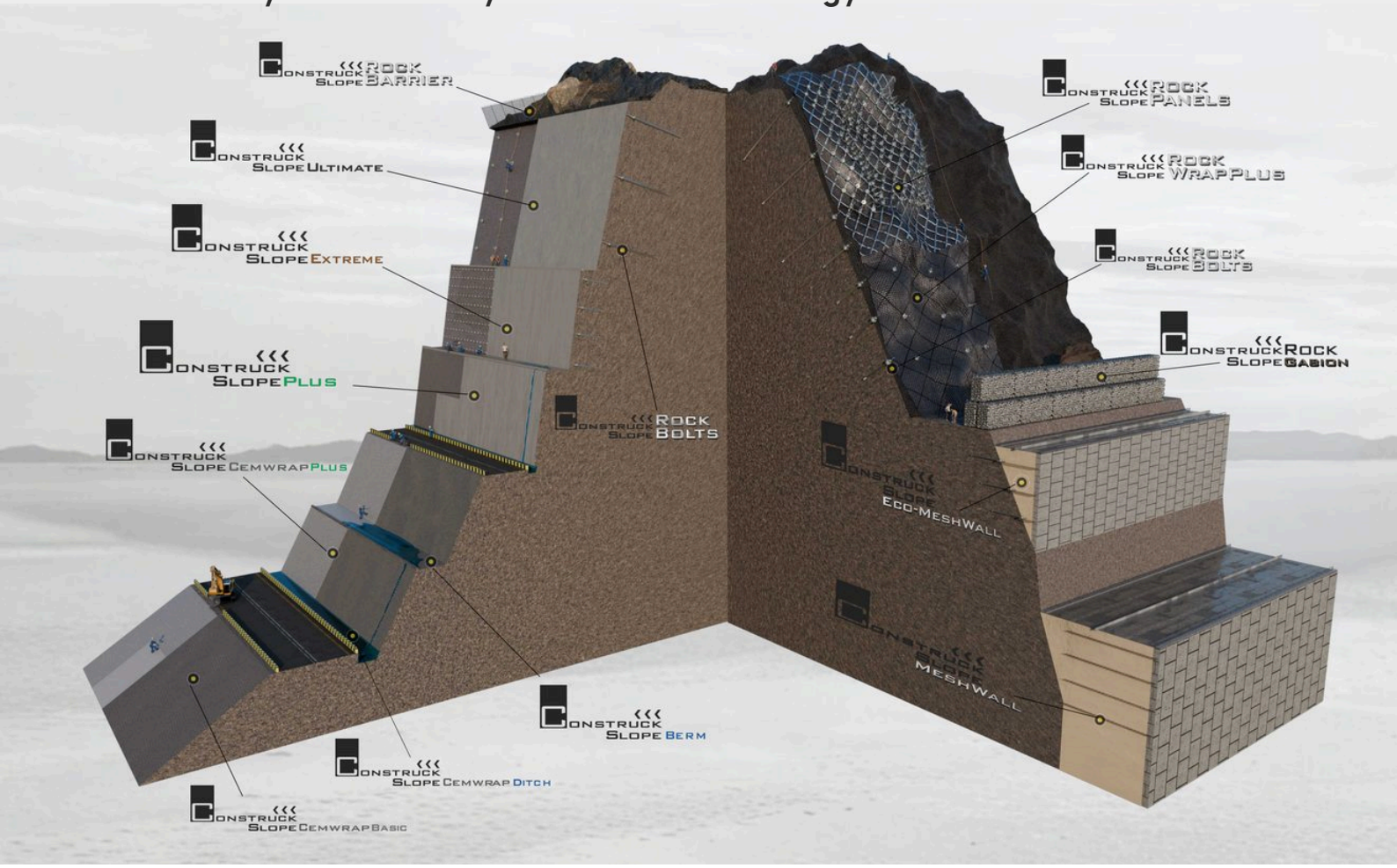
- One matched kit, one design logic, one installation pathway - reducing split responsibility between unrelated site components.
- **Factory-specified components** help improve repeatability, site quality, and approval confidence.
- **Faster programs** through modular installation, reduced heavy plant, and safer work near live roads.
- **Easier maintenance** through local panel, cable, or anchor inspection and targeted component replacement.
- **Project-specific engineering** ensures the final system is matched to slope geometry, rock condition, discontinuities, and required safety level.

Advantages

- **Rigid containment:** holds fractured rock closer to the face than ordinary drapery.
- **Anchored restraint:** transfers loads into competent rock through designed rockbolt patterns.
- **Reduced rockfall risk:** controls unstable source zones before blocks reach the road.
- **Open-face behavior:** allows water to escape instead of trapping pressure behind a sealed facing.
- **Adaptable layout:** modular panel arrangement suits irregular slopes and complex rock geometry.
- **Lower disruption:** lighter installation compared with shotcrete or heavy concrete works.
- Durable system options: corrosion-resistant coatings and stainless hardware can be selected where required.



The Widest Range of SPaaP® in the World, Powered by Construck Systems and Technology.



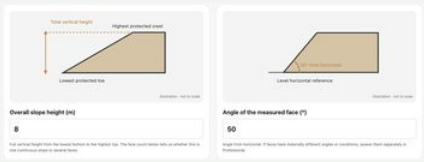
Digital support

Better decisions. A stronger project.

Explore the options, strengthen the technical basis and connect the people, information and delivery behind your Construck system.

Construck Calc

Understand the ground.
Build the technical case.



Actual Quick Check interface / sample geometry.

Quick Check
A free first step into relevant systems, preliminary quantities and indicative cost.

Professional
Bring surveys, ground conditions and existing studies into a project-specific assessment.

A further stability study
A project-specific stability study is included for each slope we take forward for protection.

calc.construck.me

ProjectSuite

One connected platform.
Support from start to finish.



Actual development workspace / sample records.

Manufacturer expertise, local support
Connect technical teams and authorised local partners around the selected Construck system.

Supply and construction, coordinated
Keep technical preparation, material supply and installation quality in the same workflow.

Sustainability and handover
Relate environmental estimates to project quantities and retain useful information for the asset.

construck.me/project-suite

Quick Check is preliminary guidance. Professional assessment and support follow the agreed scope and required approvals.













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