

Zencelades — option plans and parts control

P058/P059, October 1, 2026. Build-planning pack; structural details are not released for fabrication. Start with the ground configuration and carry the same holder into a suspended version only after the additional gates pass.

Choose one configuration, then its modules

ID	Configuration	Step-by-step plan	Selection rule
G25	2.5 m sphere, triangle and lander legs	[G25](g25-lander.md)	One sphere and one common holder
G30	3 m sphere, triangle and lander legs	[G30](g30-lander.md)	Alternative to G25; never buy both by default
S25	2.5 m sphere, same holder on aerial rig	[S25](s25-suspended.md)	Reuses G25 holder; legs retained for ground handling
S30	3 m sphere, same holder on aerial rig	[S30](s30-suspended.md)	Reuses G30 holder; greater height/fit demand
O30	Open-entry scenic sphere surround	[O30](o30-open-surround.md)	Separate ground alternative; no inflatable or suspension

Choose one visual module: L0 LEDs, P1 one projector, P2 two projectors, P3 three short-throw heads, or P4 four-head coverage study. Choose zero or one live-camera module (C1 one camera or C2 two cameras) and optional H external hazer. These modules apply to either sphere size and support mode; the module plan lists the additional checks for each. [Module plans](optics-camera-hazer.md). P3 is the configuration shown by the current four detailed models; it is not the funded \$3,000 baseline. O30 requires a fresh optical fit trial.

The alternative holder material routes are new/identified steel, known remnants, or a measured donor ring. [Material and host alternatives](materials-and-hosts.md). Truck, wood platform and water are deferred. Tree, lighting stands and an unidentified gantry are not interchangeable approved hosts.

Clear front is a design requirement

The front is the entrance side, Blender -Y. Two legs flank an open front bay; the third leg is at the rear. The shell opening faces that bay. Projector arms follow the side/rear corners and the hazer is moved to the rear. Keep braces, ballast, cases and cables out of the approach. The model checks a 1 m central planning strip for selected hardware; this is not a code-compliant accessible route or complete entry-system approval. The lower front triangle member still exists beneath the sphere: entry height, transfer, support and rescue must be resolved using the selected sphere. Do not remove a member for access without a revised structural design.

Work order and release gates

1. **Inventory and measure:** Andrew identifies actual sphere, host, hazer, available electronics and tools; record photos, manuals, condition, mass, serial/model and custody in Pacinman. Missing records remain unconfirmed.
2. **Select and mock up:** choose G25/G30 or O30, tape the complete footprint, check entry and seated space, test material optics without an occupant.
3. **Resolve design:** fabricator and competent engineer/rigger define material, joints, broad deflation support, stability, contact protection and the operation/retrieval envelope. An ordinary ring is not a floor if air is lost.
4. **Quote and commit:** issue a drawing-specific cut list only after step 3; reconcile delivered/taxed costs with \$3,000 total, including reserve.
5. **Fabricate and inspect:** work from the accepted revision; log material and joint inspections, fit and actual completed mass. No load rating is inferred from the 3D member widths or a donor's former use.
6. **Integrate and test:** complete the applicable option/module steps, then carry out the reviewer-defined unoccupied tests and recovery rehearsal. Occupied rehearsal follows only the relevant approvals; do not use a person as an improvised proof load.
7. **Pack, install and operate:** follow the [field plan](field-operations.md), obtain venue acceptance, keep the entrance clear and record daily inspections.
8. **Strike and reconcile:** remove all material, inspect and dry equipment, return loans and close Pacinman inventory/tasks with receipts.

Cost and evidence reconciliation

The current working cap is **\$3,000 TOTAL**, not \$3,000 grant plus unlimited artist money. The ground LED planning allocation is \$2,400 plus \$600 reserve. Its \$1,200 sphere/blower and \$350 holder/legs are ceilings, not supplier quotes. See [budget control](budget-and-inventory.md). Adding projection or suspension requires actual committed savings or a revised scope within that cap.

Earlier `grant-resource-ledger.md` describes purchased projectors on stands, some equipment as owned, a range above \$3,000, a rope bridle and a claim that engineering is unnecessary. Those statements are not authority for this pack. The latest brief uses arms on the triangle and over-sphere webbing; competent review remains necessary. Confirm alleged owned rig/laptop/router against real inventory. Only the hazer and pipe bender are directly confirmed owned in this chat; Denhac access is confirmed but tools/time/material are not reserved.

Inventory artifacts

- [Parts catalog](../assets/build-parts.json): unique IDs, variant/module applicability, quantities or design gaps, acquisition status and provenance. - Generated `Zencelades-Parts.csv`: one line per distinct part/resource. - Generated `pacinman-import.json`: payloads for actual `pacinman\_add\_item` tools; remote item IDs and dependency links are assigned only after a real import. - [Pacinman workflow](pacinman.md): workspace scope, deduplication and readback.

Sources used

The measured geometry comes from the P059 Blender model and exported GLB readback, not manufacturer certification. Andrew's prompts P025–P059 govern scope. `assets/seed-options.json` supplies the allocation ceilings.

The [McLaren suspended-sphere account](https://www.mgmclaren.com/blog/eventi-verticalis-suspended-sphere-performance/) documents full structural/rigging evaluation of an occupied aerial sphere; it supplies precedent, not construction details for this holder. [SpanSet's manual](https://www.spanset.com/uploads/default/PIMTree/manualbook-lifting-id-ena3.pdf) informs inspection/contact/load-distribution questions; it does not approve performer suspension. The [X-POLE height chart](https://xpole.com/wp-content/uploads/2025/06/A-Frame-Footfall-August-2024.pdf) demonstrates why actual usable attachment height matters. These three primary sources were reopened October 1. Denhac's equipment page failed the live fetch; access remains Andrew-confirmed and equipment availability unverified.

G25 — 2.5 m occupied sphere on clear-front lander legs

****Outcome:**** one selected 2.5 m sphere on the common padded loop/triangle with three detachable legs: two flanking the entrance, one at the rear. L0 LED is the allocation baseline; the model shows the unpriced P3 projection module.

Nominal layout: sphere centre 1.700 m; top 2.950 m; loop diameter 1.8288 m; triangle corner radius 1.800 m and side 3.118 m. Sphere wall thickness, inner space and 680 mm entrance are placeholders. Ring elevation is derived from contact geometry and changes with sphere diameter. Do not reuse G30 leg cuts.

Step	Work and responsible role	Record / exit criterion
1	Andrew chooses the actual 2.5 m product and obtains stationary occupied-use, inflation, ventilation, entry, contact and repair instructions.	Exact model/manual and written answers; no order based on a generic listing.
2	Andrew inventories sphere/blower, hazer, bender and accessible shop resources; weighs or requests masses.	Part records ZC-S25, S02–S05, H01 and T01–T04 have evidence or an explicit gap.
3	Builder marks a full-scale footprint, -Y entrance, side pads, rear pad and the selected optical envelope. Mock up entry/exit and seated space at ground-supported height.	Photos and measurements; no central leg/cable/case in approach; resolve transfer support.
4	Reviewer and fabricator design the triangle, loop interfaces, leg joints, contact padding and broad underside support for loss of inflation. Include eccentric occupant and optical-arm loads, ground bearing, wind and overturning.	Accepted material/joint specification, stability limits and recovery method. No stock size selected from this CAD.
5	Builder requests delivered/taxed quotes for the accepted drawing; Andrew reconciles the \$3,000 total with reserve.	Approved purchase list; identify donated work in writing; unquoted rows remain blocked.
6	Fabricator makes the jig and holder to the accepted drawing, marks front/rear, records material origin and inspects joints. Check the loop/triangle interface mismatch before joining.	Fit/inspection record; no sharp contact or seam conflict with the actual inflated product.
7	Fabricator fits three leg assemblies, retainers, braces and pads to the reviewed design. Dry assemble without a person.	All feet contact the prepared surface; front bay preserved; movement/slip and joint checks meet reviewed criteria.
8	Operator installs the ground/deflation support and inflation system per the selected sphere instructions, then inflates empty for a timed leak/contact inspection.	Correct inflation procedure, access and recovery demonstrated; no holder-induced abrasion.
9	AV lead installs L0 or the chosen P module and optional C/H modules using their plans. Measure draw and every added mass.	Optical test and load schedule; cables routed around the rear/side, covers do not block ventilation.

Step	Work and responsible role	Record / exit criterion
10	Reviewer runs the specified unoccupied acceptance checks and recovery drill; Andrew completes operator/spotter training.	Signed checks and a usable stop/evacuation procedure; no invented test load or duration.
11	Venue confirms placement, power, material/operating conditions; only then conduct the approved occupied rehearsal.	Direct exit, communications, seated comfort and operator stop demonstrated under approved conditions.
12	Label components, pack by module, install and operate through the field checklist.	Inventory count, daily inspection log and complete strike.

****BOM selection:**** common sphere/holder/operation rows + ZC-S25 + LANDER + one visual module, with C/H only when selected. Keep suspended hardware out of the ground baseline. If the sphere or support requirements cannot be met within budget, pause this option and compare O30; do not omit underside support or review.

G30 — 3 m occupied sphere on clear-front lander legs

****Outcome:**** the same visual language as G25 with the larger selected sphere. Two legs flank the entrance; the rear leg, rear equipment and side arms keep the central front bay free. Choose G30 instead of G25, not in addition to it.

Nominal centre is 1.700 m and sphere top ****3.200 m (over 10 ft)****. A smaller ground clearance and a different loop elevation follow from the larger radius; neither is an occupancy approval. The six-foot ring and 1.8 m corner radius are retained as study inputs only. The entrance now faces -Y.

Step	Action	Required evidence
1	Andrew identifies a real 3 m product, its occupied/static-use instructions, delivered price and wet/dry mass.	Manufacturer manual, exact model and price; ZC-S30 replaces S25.
2	Measure inflated outer/inner dimensions, seams, entry and valve locations and the manufacturer's permissible support/contact areas.	Fit survey; illustrative 2 m inner diameter is not treated as a spec.
3	Tape the larger sphere and complete arm envelope; mark the clear front bay and trial the entry position without an unsupported person.	Full-scale access mockup; select a safe transfer/recovery design.
4	Reviewer redesigns/checks the contact loop, broad underside support, triangle and leg length for the actual 3 m product and payload.	G30-specific accepted drawing; G25 leg lengths and reactions are not copied.
5	Confirm top height, arms, crowd circulation and all ballast/ground-bearing space with placement.	Entire installed footprint and height submitted; no under-10-ft claim.
6	Quote the accepted parts, including freight/tax and heavier handling needs. Reconcile against \$3,000.	Cost sheet includes actual sphere, support and selected optics; no assumed free rig.
7	Fabricate/inspect holder and detachable side/rear legs from the accepted drawing; mark front orientation.	Material and joint records plus measured finished mass.
8	Install support/ground protection and inflate the empty sphere under its instructions; check clearances and seam/contact behaviour through the allowed operating range.	Empty fit/leak inspection and demonstrated deflation recovery.
9	Fit selected LED/projection, capture and external haze modules. Validate the larger sphere's coverage with the actual lens.	Optical measurements, cable routing and updated load schedule.
10	Run reviewer-defined unoccupied tests, rescue rehearsal and crew training; resolve any failed check before occupancy.	Signed acceptance record and operating limits.
11	Confirm venue acceptance; conduct approved occupied rehearsal, observing entry, communication and seated comfort.	Operational release for the actual revision and location.

Step	Action	Required evidence
12	Pack, install, inspect nightly and strike under the shared field plan.	All parts accounted for, loans returned, damage logged.

****BOM:**** common rows + ZC-S30 + LANDER + one visual module. Never add both sphere sizes or both alternate ring routes into the purchase total. A larger sphere does not come with a proven larger occupant capacity.

S25 — 2.5 m sphere, common holder and aerial rig

****Outcome:**** G25's holder, with detachable lower legs retained for ground handling, becomes a suspended study using three over-sphere webbing paths, collector, swivel and controlled lowering system. The person remains central to the concept; this plan does not authorize lifting a person.

The generic CAD host is 4.8 m high. The 2.5 m model collector centre is 3.170 m and its swivel envelope reaches 3.530 m, before actual hoist/pulley and clearance allowances. Measure usable attachment height, not catalogue peak height.

Step	Action	Release condition
1	Complete G25 steps 1–5 and select the exact sphere/holder revision.	Occupied stationary sphere and support requirements known.
2	Andrew identifies the actual aerial rig, manual, configuration, ownership/loan permission and condition.	Exact usable height, attachment/load permissions, outdoor restrictions and inspection history.
3	Rigger checks the full swept envelope: sphere, side/rear arms, entry, legs/pads, webbing, swivel and lowering path.	No clashes or blocked entry; host compatibility established.
4	Engineer/rigger defines the complete occupied load path, sling contact and unequal-load cases, joints, payload, hoisting and rescue. Sphere supplier confirms applicable contact/attachment use.	Accepted system design, hardware schedule and operating/weather limits. A generic lyra swivel is insufficient evidence.
5	Decide whether the selected host is usable at all; compare the host alternatives if not.	Rejected/unknown host means no occupied suspension. Ground mode remains the candidate fallback.
6	Quote every selected suspension part and the required services, then reconcile cash with the \$3,000 total.	Actual commitments for loans/in-kind work; no zero-dollar suspension assumption.
7	Fabricate the common holder's approved lifting interfaces, retaining the clear-front orientation; inspect completed parts.	Finished mass, inspection records and documented interface compatibility.
8	Rigger assembles the selected rig on approved footing exactly to its instructions, then fits the specified lifting/retention/lowering system.	Assembly inspection, documented restraint/ballast and secured exclusion area.
9	Fit the empty sphere and over-sphere webbing with manufacturer-approved contact protection. Install optics before final balance checks.	No seam/entry conflict; all cables, arms, optics and covers included in payload/recovery review.
10	Perform the reviewer-defined unoccupied tests and controlled recovery rehearsal; prepare a ground receiving/support arrangement.	Test record meets actual criteria; no improvised occupant proof test.
11	Train and staff the operation, obtain venue acceptance and release the exact configuration for any approved occupied rehearsal.	Rigger/operator roles, stop authority, communications and retrieval demonstrated.

Step	Action	Release condition
12	Operate only within that release; lower/close using the approved sequence when conditions require. Strike and inspect all lifting components.	Log each use, damage and return; retire suspect gear from service pending review.

****BOM:**** G25 common holder/sphere + SUSPENSION + selected host + selected optics. Ground legs may remain in the transport kit but their mass is included in the lift only if carried. The central front bay remains clear of host feet and spreader ropes as well as the holder's own hardware.

S30 — 3 m sphere, common holder and aerial rig

This is the most demanding current layout. Use S25's full twelve-step workflow with the following ****required 3 m substitutions****, executed in this order.

1. ****Select S30, not S25:**** obtain the actual 3 m sphere's static occupied-use, contact, inflation, ventilation and exit documentation and measured mass. 2. ****Complete G30's fit survey:**** record seams, opening, soft inner floor and necessary deflation support. Use its holder geometry, not a scaled photo. 3. ****Measure host fit:**** model collector centre 3.420 m and swivel envelope top 3.780 m already exceed many portable aerial rigs. Add actual hoist and lowering/clearance requirements. The generic 4.8 m host is not an available product. Reject a short rig rather than removing the recovery provision. 4. ****Resolve the whole load path:**** reviewer checks actual payload, moving occupant, greater wind exposure, three webbing contact zones and loaded arms. Specify stability/restraint, hardware compatibility and retrieval. 5. ****Resolve entry at the approved boarding state:**** the -Y opening faces the bay between side supports; no boarding into a freely moving unapproved shell. 6. ****Obtain prices/commitments:**** retain \$3,000 as the total cap. If the actual host, review or hardware cannot fit, keep this as a later study and use G30 or G25 only if its own gates pass. 7. ****Fabricate the accepted G30 holder/interfaces:**** document material and inspections, weigh finished parts and update the model/BOM. 8. ****Assemble the approved host/lifting system:**** qualified crew follow the actual manuals and design, including ground bearing and restraint. 9. ****Fit all equipment empty:**** check the complete side/rear arms and their stays, sphere contact, cables, optical focus and descent/receiving clearance. 10. ****Run specified unoccupied testing and recovery drill:**** record results before the reviewer releases occupied rehearsal. 11. ****Obtain venue/operational acceptance and rehearse:**** staff operator and spotter/retrieval roles, demonstrate communication and immediate stop. 12. ****Pack/install/operate/strike:**** use the shared field checklist, recording each change of configuration. Any changed rig, sphere, arms or payload requires the applicable re-check.

****BOM:**** S30 sphere + COMMON + SUSPENSION + approved host + one visual module, optional C/H. Do not duplicate the same holder already counted in G30.

O30 — Open-entry scenic surround, person on the ground

This is the low-complexity alternative if an occupied inflatable and its support cannot satisfy the budget or product requirements. It changes the experience: the person stands/sits on an independently supported surface inside an open scenic surround. It is not a suspended zorb and is not the selected baseline.

1. Andrew decides whether this experience is acceptable as a fallback; record that choice before buying O30-only parts. 2. Mark an approximately 3 m scenic envelope and generous open entrance, with the person and accessible circulation on the ground. Do not close the entrance with a front leg, base rail, taut line or cable. 3. Test small samples of diffusing fabric/mesh with the intended LED or projector in representative darkness. Record transmission, spill, seams and view angles. 4. Reviewer/fabricator defines a scenery-only frame, joints, feet, edges and venue-accepted wind restraint. The surface area still creates wind load. 5. Obtain quotes for selected material, panels, fasteners, ground protection, wiring, review and transport; sum only O30 rows and chosen modules. 6. Fabricate the accepted frame, inspect joints/edges and dry-assemble it. Label the open front; provide independent supported seating if seating is selected. 7. Fit removable panels with the reviewed attachment method and required material documentation. Keep vented/open areas and the entry route intact. 8. Install selected light/control equipment with rear/side cables and protection; test switching, electrical load and participant sightlines. 9. Rehearse entry, stopping the show and rapid closure/packing with the crew. 10. Obtain venue acceptance, install, operate and strike under the field plan.

****BOM:**** O30 scenery rows + common operations/electrical + one light module. Exclude sphere, blower, inflatable repair kit, cradle, webbing and aerial rig. The published surround allocation is a planning range, not a purchasing quote.

Visual and participant modules

These are mutually exclusive visual packages plus optional capture and haze. The holder's three modeled arms do not establish optical coverage or capacity. Every fitted device, cover, power pack and cable enters the mass/balance review. For an empty optical bench trial, select an accepted test support rather than assembling an unreviewed occupied lift.

L0 — LEDs, baseline allocation

1. Define the visible effect and a simple participant/attendant control; choose external equipment suited to the actual setting and supply. 2. Test sample light and diffusion on the actual empty sphere/panel. Do not apply a coating, adhesive or heat source without material compatibility. 3. Choose the fixture count from the test; the BOM currently carries one kit requiring a fixture/cable breakdown rather than invented strip lengths. 4. Fit brackets and secondary retention where required; route power along rear/side members, with no cable across the entrance. 5. Record circuit load, switch-off behaviour, temperature and weather protection. 6. Rehearse the participant control and attendant stop before occupied operation.

P1 — One standard-throw projector, front-facing scene

1. Borrow/test one candidate before committing a purchase. Obtain exact lens throw ratio, image aspect, brightness, focus range, ventilation and mounting instructions. Old price references are not current purchase quotes. 2. Decide the visible patch; one head is a deliberate single-sided presentation, not a 360-degree wrap. 3. Position it on a selected side arm or independent accepted support, avoiding the central entry approach; aim onto the sphere with no participant eye beam. 4. Measure actual lens-to-surface distance and patch, focusing at several points of the curved target. A centre-to-head distance is not the throw distance. 5. Choose laptop direct HDMI if an existing compatible machine is available; verify adapters, cable length, show resolution and playback before buying a node. 6. Add the ventilated rain/salt hood, retention and strain relief; re-check balance/temperature and record the added payload. 7. Rehearse default content, restart/power loss and immediate blackout/stop.

P2 — Two projectors, deliberate partial wrap

1. Complete P1's single-head trial and choose two compatible heads. 2. Mock both positions at their real throws, mapping useful coverage and the intentional gaps/entrance sector. Do not claim complete wrap. 3. Compare two side arms against separate accepted stands. Arms preserve the one-unit concept; stands add floor area, cable crossings and ballast planning. 4. Verify the output machine can drive two independent desired signals at the chosen resolution; account for adapters and software/output configuration. 5. Calibrate per-head mesh, masks and brightness, then test imagery on the actual inflated and deformed surface. 6. Fit retained hoods/cables and update structural, electrical and transport totals. 7. Repeat the show/blackout, thermal and empty-to-occupied acceptance sequence.

P3 — Three short-throw heads on the triangle, modeled upgrade

1. Acquire one short-throw test head or an agreed loan and test focus/coverage at the actual geometry. Three purchases are not justified by a render. 2. Check each of the three side/rear corner arms, lens positions and rain covers against the chosen device and the clear-front approach. Model arms are 2 m at 30 degrees; their tube/wall/joint dimensions are not fabrication specs. 3. Test coverage at 120-degree positions on the curved sphere; map gaps, straps, occupant shadows, spill and seams. Three heads alone do not prove 360° coverage. 4. Select a source machine and verified three-output path. Count available ports, concurrent resolution/refresh and GPU/adaptor limitations, not connector shapes. 5. Have the completed three-arm payload, bending, stays/retention and imbalance assessed in both selected ground and lifted modes. 6. Fit three specified mounts, canopies and cable looms, keeping connectors dry with their required ventilation and strain relief. 7. Calibrate all three outputs and save a reproducible show preset. Run sustained empty tests for focus/temperature and safe stop before occupied rehearsal. 8. Obtain actual quotes for three heads, output hardware and accessories. If this does not fit the \$3,000 total, retain P1/P2/L0 or secure itemized loans.

P4 — Four-head coverage study, new mount design required

1. Choose four-head study only if the actual P2/P3 optical trial shows a need. 2. Draw four verified lens positions and coverage; rotating one into the front bay is not acceptable. Three triangle corners cannot simply become four. 3. Reviewer designs the

fourth support and its reactions/clearances or accepts a separate stand outside circulation; update the CAD and parts before fabrication. 4. Verify four real video outputs and synchronisation, then quote the complete output/mount/cover/cable package. 5. Re-run the applicable P3 empty coverage, thermal, blackout and payload tests. 6. Reconcile the total budget. This is a deferred optical study, not one of the four delivered three-head assemblies or an included Seed purchase package.

C1 / C2 — One or two participant cameras, optional

1. Start with one available phone/camera; record exact model, ownership, battery state, lens and connection. A prior note saying “owned” is not a reservation. 2. Test the required view outside the empty sphere first. Compare an external triangle arm through clear skin against an internal position approved for the selected sphere; keep entry and seated movement clear. 3. Specify mounts, retention, power-bank and cable containment compatible with the sphere/holder. Nothing sharp or hot rests against occupied skin/floor. 4. Test camera feed to the actual laptop/node on the intended local connection, with latency, dropouts, exposure and distortion recorded. 5. Implement/test participant consent and an obvious stop control. Use local live display with recording off unless a separate informed choice enables it. 6. Compose the live image over moon content; test failure fallback to the moon scene rather than freezing a participant's face indefinitely. 7. Add a second camera only when its distinct view helps; C2 replaces C1's count, not an additional two cameras. Verify two simultaneous feeds and output load. 8. Repeat actual-location and occupied acceptance after all earlier gates.

Internal cameras are optional and absent from P059's detailed GLBs. The live overlay cockpit study is a separate concept, not the documented hardware setup.

H — Owned large external hazer, behind/below the sphere

1. Andrew identifies the actual owned model, fluid, power and manual; acquisition cost is zero, while fluid, protection, transport and power remain unpriced. 2. Place it to the rear beneath the sphere's lower edge only if its manual's clearance, orientation and ventilation requirements are satisfied. The CAD envelope is not the measured unit and rear placement is still provisional. 3. Obtain venue permission and determine weather/power limits. Keep discharge, heat and electrical equipment away from the entrance, participant and air intake. 4. Test the effect externally with the sphere empty, minimum useful output and an attendant stop; assess visibility, drift and residue on shell/lenses. 5. Confirm the effect does not compromise supervision, footing or electronics; include a no-haze show preset and remove the effect when conditions require. 6. Log fluid use, inspect/clean per manual and pack the cooled unit separately.

No hose into the occupied sphere or haze mixed into its inflation air is included in this build plan. The hazer is an external optional effect, not a blower.

Material routes and alternate hosts

Holder route M1 — Identified new steel

1. Complete the sphere/contact and load-path review before specifying stock. 2. Ask the fabricator for grade, tube/section, wall, joint and corrosion details on a controlled drawing, with an actual cut list and fabrication tolerances. 3. Quote stock, cut/roll work, plates, retained joints, consumables, finish and transport. The nominal triangle side is a layout length, not a saw setting. 4. Receive material with identification, inspect and measure it; reject defects under the fabricator's criteria. 5. Build a jig, fabricate and inspect under the accepted method; record mass and update the common-holder inventory. Dry-fit the ring and all contact padding.

M2 — Known remnants / salvaged straight members

1. Inventory actual available pieces, lengths, sections, corrosion and provenance. 2. Reviewer/fabricator decides which pieces can be identified and accepted for each job; unknown steel is not automatically acceptable in the occupied load path. 3. Compare all-in cost including cleaning, inspection, new joints and rejected yield with M1. Do not book a savings until the usable stock is accepted. 4. Issue the cut list against identified pieces; segregate rejected/decorative stock. 5. Follow M1 fabrication/inspection, retaining piece-to-assembly traceability.

M3 — Six-foot trampoline ring donor

1. Identify and measure the exact donor; "six foot" may describe outer size, not ring centreline. Record tube section, wall, segment/joint retention and condition. 2. Reviewer assesses the changed load direction, concentrated interfaces, corrosion and joints. The original trampoline's ground-use rating does not transfer to a sphere seat or lifting component. 3. Compare accepted donor refurbishment and retention costs with a rolled ring. Reject a donor when condition/material cannot be established. 4. Design the loop/triangle interfaces and padding against the selected sphere; the nominal CAD has 14.4 mm centreline overhang at side midpoints. 5. Fabricate only the accepted adaptation, inspect it and update the model and mass. M3 replaces the M1 rolled-ring item; it never creates a second ring purchase.

Host H1 — Existing aerial rig (preferred candidate for suspension)

1. Identify actual rig and manual, ownership/loan permission and inspection history. 2. Measure usable attachment height, span and leg/spreader envelope in its intended configuration. 3. Obtain written confirmation/review for this occupied apparatus, total load, outdoor ground/wind and recovery arrangement; an aerial rating alone is not enough. 4. Follow S25/S30 only if those checks pass; otherwise retain ground mode.

H2 — Purpose-designed freestanding gantry / tripod

1. Treat it as a different host with its own drawing and quote, not scrap added above the completed sphere. 2. Reviewer defines member/joint design, foundations/restraint, complete payload, lateral effects and recovery; preserve front access and full arm clearance. 3. Compare delivered, inspected and installed cost against H1 and ground mode. 4. Fabricate/obtain only the accepted host and its inspection/assembly records. 5. Re-run every S25/S30 host, unoccupied-test and operational gate. No detailed fabrication plan is released for an unidentified host.

H3 — Lighting-truss goalpost / crank stands

1. Obtain the exact manufacturer/model and intended load/application documentation. 2. Confirm with manufacturer and qualified reviewer whether an occupied suspended apparatus and its loads are permitted. Lighting-equipment capacity is not permission to lift or support a person. 3. If not permitted, reject this host for occupancy; do not substitute a larger stated SWL as a workaround. 4. If applicable permission/design is obtained, document locking, lowering, stability, footing, redundancy and access, quote it and follow S25/S30 gates.

H4 — Existing overhead point or tree (site-specific investigation)

1. Obtain explicit venue/property approval for the exact location and use; trees in a public park are not presumed available anchors. 2. For a structural point, obtain its documented support capacity and allowed load directions. For a tree, engage an appropriate arborist plus the rigging/ structural reviewer; a photograph or trunk diameter does not supply a rating. 3. Reviewer defines non-damaging interfaces, load path, independent requirements, clearances, weather limits and rescue for the selected apparatus. 4. Quote all required services/hardware and accept or reject within budget. 5. Only an accepted site-specific system proceeds through S25/S30. Otherwise use the reviewed lander option. No tree-wrapping/branch-selection recipe is assumed.

Truck cantilevers, receiver/fifth-wheel mounts and wood platforms remain excluded from active procurement. They are historical model references, not unfinished steps in the current build.

Packing, installation, operation and strike

Before loading

1. Freeze one option/module revision and print its approved drawings, manuals, contact details, inventory and operating limits. Keep budget/approval receipts together. 2. Check each serialized lifting/electrical/optical item and its inspection status; segregate damaged or unidentified pieces. Pack the accepted repair kit separately. 3. Mark triangle front/rear and matching joints; bag retainers by assembly and label cases CORE, LANDER, OPTICS, CAPTURE, HAZE, RIGGING, OPERATIONS. 4. Record quantities, mass, dimensions and vehicle loading/securement plan from actual equipment. The truck is transport only; do not infer capacity from the model. 5. Confirm all borrowed items, return dates and assigned crew; photograph the packed kit.

At the site

1. Confirm the approved position, underground/overhead restrictions, access, surface and power with placement before unloading the full installation. 2. Mark the complete footprint including arms, host, ballast and circulation; place the entrance-facing open bay first. Keep the approach free throughout setup. 3. Unload into a controlled work area; assemble the accepted base/host and ground protection according to its drawing/manual. Do not improvise stakes or tree ties. 4. Install sphere/support empty, then optics/covers/cables, checking final mass and balance. Route power at the rear/sides with appropriate protection. 5. Complete commissioning: electrical protection, inflation/ventilation, contact/clearance, show/blackout, communication, retrieval and weather limits. 6. Release occupied operation only after the required review/venue checks and a fully staffed rehearsal; record who has stop authority.

Each operating session

1. Operator checks weather and actual assembly against the released revision; inspect inflation, contact zones, joints, legs/footing or rigging, cords and covers. 2. Spotter clears the entrance and verifies the stop/communication/retrieval method. 3. Explain participation, consent for any camera feed and immediate exit; use only the occupancy and conditions permitted by the selected system. 4. Monitor participant comfort, equipment temperature, inflation and conditions; close immediately at the approved stop criteria or any unexpected behaviour. 5. End the session using the approved ground/lowering procedure; isolate power, cool effects equipment and record defects before the next opening.

Do not improvise numerical wind limits, occupancy times, ballast weights or proof-test loads. Those are outputs of the actual equipment/design review.

Strike and return

1. Close participation, evacuate through the approved procedure, isolate effects and lower/support the apparatus by the accepted method. 2. Deflate, disassemble and protect surfaces following product instructions; keep heavy/dirty metal away from the sphere and lenses. 3. Count every part and fastener; sweep the site for tape, metal, plastic, fluid residue and other material, then obtain the agreed site handback. 4. Dry, clean, inspect and quarantine damage; record actual consumption and costs. 5. Return loans and update Pacinman custody, condition and task completion.

Budget control and inventory meaning

The \$3,000 TOTAL cap is a constraint, not evidence that any configuration has been fully priced. Prices below are ****allocation ceilings from the current seed plan****, not refreshed retail offers. No purchase is authorized by this inventory.

Ground sphere + LED allocation	USD ceiling
Selected occupied sphere and blower, delivered/taxed	1,200
Common holder and detachable legs	350
Padding, mats and contact protection	100
LED/control kit	150
Electrical/cable protection	100
Transport/setup supplies	100
Operation/repair supplies	100
Review/permits/insurance	300
Allocation subtotal	2,400
Uncommitted reserve	600
Total cap	**3,000**

Projection, aerial host/rigging, cameras, generator and hazer consumables are not magically inside these lines. Each option needs itemized delivered/taxed quotes and actual loan/donation commitments. If a line goes over its ceiling, reallocate transparently or change scope; never suppress the unknown price. Grant, fundraiser and Andrew contribution are funding sources for the same total. Keep acquisition, operating cost and reusable owned assets separate.

The master parts catalog uses null for unknown costs and quantities requiring design. A quantity of one **kit/lot/assembly** means one required package; its notes explicitly require an eventual component breakdown. It is not a claim that one bolt, one metre of cable or one bag of ballast suffices.

Inventory status

Evidence	Pacman state	Meaning
Andrew-confirmed owned hazer/bender	have	Ownership only; suitability, condition and reservation still need checking
Required item with unresolved design/model	blocked	Required planning row; do not buy from the placeholder
Optional/alternative item	maybe	Not selected or funded; not an additional purchase
Selected exact item with validated quote, ready to procure	to-buy	Only after Andrew selects the option and approves the actual purchase
Actual receipt/inspection	have / subsequent packing states	Update after receipt, never from a budget entry

Pacman requires numeric `estimated_price` with a default of zero. For unquoted rows, the import retains zero only as that application's unset representation, adds ``cost-unquoted`` tags and explicit notes, and keeps authoritative costs null in ``build-parts.json``. ****Pacman's raw estimated-cost sum is incomplete****, not the cost of a funded build. Do not mix the alternative variants' totals.

Quote/receive loop

1. Filter the selected configuration and modules; de-duplicate shared IDs. 2. Complete specifications/quantities and collect quotations with seller, date, delivered price, tax, availability and return/loan terms. 3. Reconcile subtotal plus reserve against \$3,000; record accepted funding and outstanding funding without treating a hoped-for grant as cash received. 4. After a real purchase or loan commitment, attach evidence and update custody, quantity, price and condition. Nothing in this task places an order. 5. Before packing, reconcile physical counts with selected requirements; list shortages separately from unselected alternatives and shop resources.

Pacnman inventory and task workflow

The real deployed producer-scoped MCP connector was read October 1, 2026. It exposes ``pacnman_get_workspace``, ``pacnman_search_items``, ``pacnman_add_item``, ``pacnman_update_item`` and related inventory tools. Its current shared workspace is ``burning-man-2026``, named ****Burning Man 2026****. The initial read returned 316 visible items and revision 24. Searches found no Zencelades/Enceladus, sphere, projector, aerial rig, bender, laptop or UniFi records. One old hazer entry exists with status ``maybe``; it was not overwritten or treated as the confirmed owned unit.

Andrew explicitly selected a clearly labeled Zencelades category inside that shared workspace. All new rows identify Love Burn 2027 in their notes/tags; the existing workspace is not renamed or repurposed.

Supported import sequence

1. Read the live workspace and tool definitions. Match the chosen workspace; stop if the connector's scope differs. Never reuse arbitrary browser cookies. 2. Search ``Zencelades`` and each stable part key ``[ZC-...]'``. If a prior row exists, compare it; never create a duplicate or overwrite other edits blindly. 3. Add one group-scoped item per part/resource through ``pacnman_add_item``. Titles contain the stable key; category is ``Zencelades / <module>`` and notes preserve quantity basis, alternatives, ownership evidence and price gaps. 4. Keep source URL blank for unselected items, avoiding automatic enrichment of a guess. Exact source/manual links belong in notes until a real SKU is chosen. 5. Add sequenced task records with ``task_enabled=true``; map stable task keys to the actual returned item IDs. Add prerequisite IDs only after they exist. 6. Read back every created item and compare names, quantities, status, scope, notes and task dependency IDs. Store a receipt without credentials/private unrelated inventory. Stop on conflicts and leave existing rows preserved.

Alternatives are tagged, not all marked essential. Only one sphere and one visual package is selected at a time. Pacnman's raw sum includes alternative and unset-price rows, so the variant-aware BOM and budget control remain the authoritative planning view. No retailer cart, order, schedule or notification is created by this import.

The connector reads its own protected runtime through its documented launcher; Codex does not export tokens. Pacnman and its inventory stay private even though the art project's generic plans and models are public.