

RESTREPO STANDARD

Quiet. Calm. Cured.

Pre-Wellness Rough-In Standard

O₂ · HBOT · Sauna · Cold Plunge · Steam · Float

Wellness is plumbed, vented, and powered before drywall.

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PREFACE

A wellness room is plumbed, vented, and powered before drywall closes the wall. Whatever rough-in is set at framing is what the home will live with for thirty years. This standard codifies the pre-wellness rough-in discipline that makes that single construction window survivable across all six pillars: oxygen enrichment, hyperbaric oxygen therapy, sauna, cold plunge, steam shower, and float. Eleven domain sections plus without-written-direction, the pre-pour checklist, the QC gate, and citations. Wellness is plumbed, vented, and powered before drywall.

This standard does not replace manufacturer instructions, code authorities, or professional licensing. NFPA 99-2024 (Chapters 11, 14), NEC 2020 Art. 680, NEC 2020 Art. 422, IRC 2021, ASHRAE 62.2-2019/2025, FDA 21 CFR 868.5470, and NJ Uniform Construction Code (N.J.A.C. 5:23) govern. Manufacturer install guides from Harvia, OxyHealth, Mr. Steam, Plunge, BlueCube, and i-sopod are the floor. See Citations for primary source URLs.

Wellness is plumbed, vented, and powered before drywall.

Rough-in it like it cannot be opened.

01 PILLAR MAP & PRE-ROUGH SEQUENCE

Six pillars define the Restrepo wellness room: Oxygen, HBOT, Sauna, Cold Plunge, Steam, and Float. Each pillar has unique MEP requirements that must be rough-in complete before drywall. Sequencing: framing verification, plumbing rough-in, electrical rough-in, HVAC duct rough-in, acoustic assembly, waterproof membrane, finish.

Oxygen (O₂)

PSA concentrator room; dedicated 20A circuit; dedicated exhaust to exterior; no NM cable; O₂ monitor with alarm. Room volume 200-400 ft³ for residential enrichment.

HBOT

Soft-shell chamber 1.3-1.5 ATA; dedicated 20A circuit; vibration isolators on compressors; EMI-shielded conduit zone; no overhead recessed cans above chamber.

Sauna

Traditional Finnish or infrared; dedicated 240V 30-60A heater circuit per kW rating; UL 875 listed heater; floor drain with P-trap; vapor barrier + foil face interior.

Cold Plunge

350-700 gal typical load range; NEC 680 GFCI within 5 ft of tub inside wall; structural verify for upper floors; 2" drain to building drain; waterproof membrane.

Steam

Generator 6-24 kW at 240V 1-ph; dedicated circuit; 1" minimum drain; corrosion-resistant exhaust duct; vapor seal ≤ 0.5 perm; blow-down valve on generator.

Float

1,200-1,500 lb Epsom salt solution; 2" drain; PVC Sched 80 throughout (no copper in saline path); corrosion-coated mini-split coil; floating subfloor for acoustic isolation.

Sequencing

Framing dimensions verified → plumbing rough-in → electrical rough-in → HVAC duct rough-in → acoustic assembly → waterproof/vapor membrane → finish.

SPEC · SEQUENCING LOCK

No electrical rough-in proceeds before plumbing rough-in pressure test is signed. No HVAC duct rough-in proceeds before electrical rough-in inspection. No waterproof membrane proceeds before framing dimensions are verified to equipment dimensional clearances. Sequencing deviations require written direction.

02 ELECTRICAL ROUGH-IN

Each wellness modality receives a dedicated circuit. NEC 2020 Art. 680 governs GFCI requirements for plunge and float. Art. 422 governs sauna and steam heater disconnects. EMT is the standard conduit throughout wet wellness zones.

CIRCUIT	MODALITY	VOLTAGE	AMPERAGE	GFCI	NOTES
O₂ Concentrator	Oxygen / HBOT	120 VAC	Dedicated 20A	Per NEC 210 for location	EMT or RMC; no NM in O ₂ -enriched zone; TVSS on circuit per IEEE C62.41.2.
Sauna Heater	Sauna	240 VAC	Dedicated 30-60A 2-pole	Not required (dry location)	Size per heater kW: 3 kW = 20A; 6 kW = 40A; 8 kW = 50A. 125% continuous-load rule NEC 210.19(A)(1). UL 875 listed.
Steam Generator	Steam	240 VAC	Dedicated 30-60A 2-pole	Not required at panel; GFCI at generator per MFR	90°C THHN copper conductors; blow-down and drain within 6" of generator; EMT from panel to generator.
Cold Plunge / Float	Plunge / Float	120 VAC	Dedicated 20A	GFCI within 5 ft per NEC 680.5(B)	NEC 680 applies; GFCI breaker or GFCI recept at unit; confirm GFCI compatibility with chiller motor inrush.
HBOT Compressor	HBOT	120 VAC	Dedicated 20A	Per NEC 210 for location	EMI shield consideration: shielded MC-HL or EMT; no recessed cans directly above chamber; no NM without written direction.
EMT vs Flex Policy	All Wellness	N/A	N/A	N/A	EMT standard throughout wet wellness zones; flex at final 6" equipment connection only; no NM in steam, plunge, float, or O ₂ walls.

ELECTRICAL DISCIPLINE

- Dedicated circuits: each wellness modality receives its own dedicated circuit with a labeled breaker in the distribution panel. No shared circuits across modalities.
- NEC 680 zone: the 5-ft GFCI zone applies to all 15A and 20A, 120V circuits supplying equipment within 5 ft of the inside wall of any plunge, float, or steam enclosure.
- EMI near HBOT: users sensitive to EMF may request shielded MC-HL or full EMT conduit for all circuits in the chamber zone. No overhead lighting arc directly above the chamber opening.
- Sauna disconnect: NEC 422.31 requires a disconnecting means for all permanently installed sauna heaters. A lockable breaker within sight of the heater is the standard residential solution.
- AFCI in HBOT and O₂ rooms: NEC 2020 Art. 210.12 requires AFCI on 15A and 20A, 120V circuits in habitable spaces. Confirm AFCI/GFCI combination breaker compatibility with concentrator and compressor before install.
- Spare hardware: minimum 5% spare breakers, wire connectors, EMT fittings, and flex connectors delivered at closeout, serialized and labeled.

03 PLUMBING ROUGH-IN

Each wellness modality has specific drain sizing, trap, vent, and material requirements. All plumbing work is governed by NSPC 2021 (NJ Plumbing Subcode). Salt-resistant materials are mandatory in the float plumbing path. Blow-down provisions are required for steam generators.

ELEMENT	MODALITY	DRAIN SIZE	TRAP / VENT	MATERIAL	NOTES
Steam Drain	Steam	1" min	P-trap + vent per IPC/NSPC	Copper or CPVC above slab	Locate within 6" of generator blow-down valve. Slope 1/4" per ft to building drain. Trap primer per ASSE 1018.
Cold Plunge Drain	Cold Plunge	1-1/2"-2" min	P-trap + vent	304 SS or PVC Sched 80	2" preferred for rapid drain. Floor drain within 6 ft of tub for plug-in units. Vacuum breaker on fill supply per NSPC 2021 §608.
Float Tank Drain	Float	2" min	P-trap + vent	PVC Sched 80 throughout	No copper in saline path; 1,200 lb Epsom salt solution is corrosive. P-trap must be sealed to prevent evaporation between sessions.
Sauna Floor Drain	Sauna	2" min	P-trap + vent	Schluter KERDI-LINE or similar	Required for löyly runoff per IRC/NSPC. Slope floor 1/8" per ft to drain. Trap primer or barrier seal per ASSE 1072.
Float Fill / RO	Float	3/4" cold supply	Backflow preventer req.	PVC Sched 80; no copper	RO + softener loop recommended for saline solution makeup. Install shutoff valve and vacuum breaker at supply.
Steam Generator Blow-Down	Steam	1" blow-down	Indirect waste to floor drain	Stainless or CPVC	Blow-down valve purges mineral scale per manufacturer schedule. Indirect waste prevents backflow. Annual descaling protocol.

PLUMBING DISCIPLINE

- All drains, traps, and vents are governed by NSPC 2021 (NJ Plumbing Subcode per N.J.A.C. 5:23-3.15). IPC 2021 is the reference standard for trap and vent requirements where NSPC aligns.
- Salt-resistant materials are mandatory in the float plumbing path. PVC Schedule 80 throughout; no copper, no galvanized. Epsom salt (magnesium sulfate) accelerates copper corrosion.
- Basement plunges on concrete slab: a French drain or trench drain at the perimeter of the plunge zone handles condensation and splash drainage effectively without a dedicated floor drain.
- Fill connections: cold plunge and float tanks require a vacuum breaker (backflow preventer) on the potable supply connection per NSPC 2021 and IPC 2021 Section 608.
- Venting: all fixture drains connect to the building vent stack within the distances specified by NSPC 2021. Wet venting is acceptable for steam and plunge drains where allowed by AHJ.
- Spare hardware: minimum 5% spare PVC fittings, trap primers, and shut-off valves delivered at closeout with serialized labels.

04 HVAC & VENTILATION

Wellness rooms require dedicated ventilation paths. No shared ductwork between wellness zones and bedrooms. ASHRAE 62.2 is the baseline; each modality adds specific exhaust requirements. Salt-air, steam, and O₂-enriched air are never recirculated to other spaces.

ASHRAE 62.2 Baseline

ASHRAE 62.2-2019/2025 establishes minimum whole-house mechanical ventilation rates. Wellness rooms supplement the baseline: each room adds its own dedicated exhaust. Formula: $Q = 0.03 \times A_{\text{floor}} + 7.5 \times (N_{\text{br}} + 1)$ CFM for the whole dwelling.

Dedicated Returns / Exhausts

No shared ductwork between wellness rooms and bedrooms or living spaces. Each modality zone receives its own dedicated exhaust path to the exterior. Cross-contamination of steam vapor, O₂-enriched air, or salt air into HVAC supply is prohibited.

O₂ and HBOT Humidity Exhaust

O₂ rooms and HBOT rooms require a minimum dedicated 50 CFM exhaust fan interlocked with the concentrator power circuit. Exhaust discharges directly to exterior. Concentrator fresh-air intake draws from outside the enriched zone only.

Sauna Vapor Relief

Traditional sauna rooms require a passive or active vapor relief path from ceiling to exterior. Dedicated exhaust fan (minimum 150 CFM) with humidity sensor override. No shared return plenum with any other room.

Steam Duct Corrosion Resistance

Steam shower exhaust ductwork must be corrosion-resistant: stainless steel, PVC-coated galvanized, or fiberglass-reinforced plastic. Standard galvanized rectangular duct degrades within 3-5 years in continuous steam exposure.

Float Salt-Air Mini-Split

Float tank rooms require a dedicated mini-split with corrosion-coated coil rated for salt-air exposure. Mitsubishi Diamond (hyper-heat) with corrosion coating is the standard specification. No uncoated coil in the float room.

Exhaust Separation

Wellness room exhaust terminations must be located a minimum of 10 ft from any fresh-air intake. This prevents recirculation of steam, O₂-enriched air, or salt air back into the building HVAC system.

INSPECT · EXHAUST SEPARATION

Verify 10-ft minimum separation between wellness exhaust terminations and any fresh-air intake before duct rough-in is approved. Mark termination locations on the exterior elevation drawing and confirm with GC at pre-rough-in meeting.

05 FLOOR LOADING & WATERPROOFING

Cold plunge and float tank live loads exceed standard residential wood-frame design loads. Structural verification is required before installation on any above-grade floor. Waterproof membrane is mandatory in all wet wellness splash zones.

Cold Plunge Live Load

Cold plunge units hold 350-700 gal × 8.34 lb/gal = 2,919-5,838 lb water plus tub and occupant. Total live loads of 3,000-6,000 lb on a concentrated footprint exceed residential wood-frame design loads of 40 PSF. Structural engineer required for all above-grade installs.

Float Tank Live Load

Float tank solution (1,200 lbs Epsom salt + 200 gal water) produces a total dead + live load of 1,500-2,000 lb on a 20-25 ft² footprint. Upper-floor installs require sistered joists or a steel beam below.

Structural Verify

Engage a licensed structural engineer before installing any plunge or float tank above grade. Common mitigation: sister joists at 1:1 ratio across the tub span, or a mid-span support post and beam. Distribute load over minimum 3 joists each side using 3/4" plywood platform.

Schluter KERDI / Hydro Ban Membrane

Waterproof membrane is required on all floors and walls within the splash and overflow zone of plunge, float, and steam enclosures. Schluter KERDI (polyethylene sheet + KERDI-BAND at transitions) or Laticrete Hydro Ban (liquid-applied, single component) are the two accepted systems.

Drain Slope

Floor slope minimum 1/8" per foot toward the drain for all wet wellness floors. Plunge surrounds, steam floors, and float room perimeter floors all slope to drain. Schluter KERDI-LINE linear drain eliminates complex multi-slope tile work.

Sealed Penetrations

All pipe penetrations through the waterproof membrane are sealed with KERDI-SEAL pipe seals (Schluter) or equivalent liquid membrane boot. No unsupported hole through the membrane. Flood-test each assembly for 24 hr prior to tile installation.

Photo Documentation Before Tile

Every membrane installation, every drain connection, every sealed penetration photographed before tile goes down. Archive to project record. Photo doc is the record of what is beneath the finish surface.

06 ACOUSTIC ISOLATION

Wellness rooms generate compressor noise, vibration, and low-frequency mechanical sound that transmits readily through wood-frame construction. $STC \geq 55$ and $IIC \geq 55$ are the minimum targets at all partitions adjacent to habitable spaces.

Wall STC Target

$STC \geq 55$ at all partitions between wellness rooms and habitable spaces (bedrooms, living areas, home office). Double-stud wall assembly with 3-1/2" air gap and mineral wool batt achieves STC 60-65 when combined with resilient channel.

Floor IIC Target

$IIC \geq 55$ at all floor/ceiling assemblies below or adjacent to wellness rooms. Floating floor system with neoprene or rubber isolation pad under subfloor achieves IIC 55-60 in standard wood-frame construction.

Double-Stud and RC Channels

Double-stud walls decouple the room shell from the structural framing. Resilient channels (RC-1 or hat channel) on one side of the assembly further break the structural sound path. All channel screws must clear the stud flanges to preserve decoupling.

Mass Loaded Vinyl (MLV)

1 lb/ft² MLV layer added to double-stud assembly improves STC by 5-8 points. MLV is installed between gypsum layers, lapped 2" at seams, and sealed with acoustic caulk. Provides significant low-frequency (125-250 Hz) attenuation for compressor and chiller noise.

Floating Floor Under Float Tank

Float tanks transmit low-frequency vibration to the floor structure. A floating subfloor assembly (minimum 3/4" plywood over 3/8" neoprene isolation mat or Kinetics RIM isolation) decouples the tank from the structural floor. IIC improvement: 10-15 points.

Vibration Isolators on Compressors

All HBOT compressors and cold plunge chillers are mounted on 2" neoprene or rubber-steel anti-vibration pads. Multi-compressor configurations use a common anti-vibration base plate. Flexible hose connections prevent vibration transmission to rigid plumbing.

Acoustic Door Seals

Wellness room doors require acoustic door seals (perimeter gasket + automatic door bottom drop seal) to prevent flanking transmission through the door gap. Minimum STC 45 door assembly for rooms adjacent to bedrooms.

07 FOAM, VAPOR & MATERIAL SELECTION

Material selection in wellness rooms is governed by the specific hazard profile of each modality. Oxygen-enriched atmospheres require low-VOC finishes and prohibit petroleum-based materials. Steam and plunge assemblies require closed-cell foam and continuous vapor seals.

Closed-Cell Foam in Steam and Plunge Walls

Closed-cell spray polyurethane foam (ccSPF) is the correct insulation choice for steam shower and cold plunge walls. It provides both thermal resistance and vapor retarder function in a single application. Minimum R-21 in 3-1/2" stud cavity.

No Off-Gassing Materials in O₂ Rooms

Oxygen-enriched atmospheres accelerate combustion of organic materials. No oil-based finishes, alkyd paints, petroleum-based caulks, or latex foam underlayment in the O₂ delivery zone. Low-VOC water-based finishes only. Zero-VOC preferred per NFPA 53 Chapter 4 guidance.

Sealed Wood

All wood trim and paneling in steam and O₂ rooms is sealed with water-based polyurethane. No oil-based topcoats. Unsealed wood in high-humidity environments absorbs moisture, swells, and provides a substrate for mold growth.

Low-VOC Finishes

All paints, adhesives, grouts, and sealers in wellness rooms are low-VOC (< 50 g/L for flat paints; < 150 g/L for non-flat per SCAQMD Rule 1113). Zero-VOC preferred for O₂ and HBOT rooms.

DC315 Thermal Barrier Where Exposed

Where closed-cell SPF is exposed (sauna wall framing, plunge room framing) and not covered by gypsum, apply DC315 intumescent coating at the manufacturer-specified coverage rate as the 15-minute thermal barrier per IRC 2021 and IBC 2021 §2603.4.

No Open-Cell Foam in Steam or Plunge Paths

Open-cell foam is vapor-permeable and absorbs moisture. It must not be used in steam shower walls, cold plunge surrounds, or any assembly where liquid water or sustained high humidity is expected. Closed-cell or rigid foam only in these locations.

Vapor Seal Continuity

The vapor retarder assembly in steam and float rooms must be continuous: no uncoated penetrations, no unsealed laps, no missing boot fittings at pipes or conduit. Vapor seal permeance target: ≤ 0.5 perm per TCNA steam shower membrane standard.

08 WITHOUT WRITTEN DIRECTION

Seven actions do not occur on a Restrepo Vol 18 project without written direction from the Restrepo principal. Written direction means a signed project record entry, a documented principal authorization, or a formal client contract clause.

We do not commit the wellness envelope without written direction:

- 1 We do not commit to BX/MC in wet wellness walls without written direction: default is EMT conduit or rigid raceway in any steam, plunge, float, or O₂-enriched wall cavity.
- 2 We do not use copper in the float tank saline plumbing path without written direction: default is PVC Schedule 80 throughout; Epsom salt solution degrades copper within the first service interval.
- 3 We do not run shared ductwork between wellness rooms and bedrooms without written direction: each modality zone receives its own dedicated exhaust path; no shared supply or return plenum.
- 4 We do not install AFCI breakers in HBOT or O₂ rooms without manufacturer review and written direction: arc-fault detection in oxygen-enriched environments requires specific product confirmation from the concentrator and chamber manufacturer.
- 5 We do not specify an uncoated mini-split coil in the float tank room without written direction: Epsom salt air corrodes uncoated coils within 12-24 months; corrosion-coated coil is mandatory.
- 6 We do not locate recessed cans directly above the HBOT chamber without written direction: arc-fault or lamp failure above the chamber opening is a hazard in any O₂-adjacent environment.
- 7 We do not permit off-gassing materials (oil-based finishes, petroleum-based adhesives, synthetic petroleum-fiber carpet) in the O₂ room without written direction: oxygen-enriched atmospheres lower the ignition threshold of all combustibles.

09 PRE-POUR / PRE-DRYWALL CHECKLIST

Every item below is verified before concrete pour or drywall close. Any unchecked item holds the schedule until remediated. This checklist is the gate between rough-in and finish.

- ☐ Framing dimensions verified: all wellness room rough openings, ceiling heights, and structural bays confirmed against equipment dimensional clearances
- ☐ Plumbing rough-in pressure-tested: all supply and drain lines tested per NSPC 2021 before walls close
- ☐ Drains photographed: every drain location, trap, vent connection, and slope documented before concrete pour or membrane
- ☐ GFCI and AFCI verified: NEC 680 GFCI within 5 ft confirmed at plunge and float circuits; AFCI on habitable-space circuits confirmed
- ☐ Dedicated panel labeled: every wellness circuit has a breaker label identifying modality, room, and amperage before rough-in inspection
- ☐ Mini-split sleeve and condensate drain in place: sleeve through wall, insulated, with condensate line stubbed to floor drain
- ☐ Sauna heater stub: 240V circuit stubbed to heater location; disconnect means within sight of heater location marked
- ☐ HBOT power and EMI shield: dedicated 20A circuit stubbed; EMT or shielded conduit in chamber zone; no overhead fixture stub above chamber footprint
- ☐ Vapor seal continuity confirmed: all membrane laps, boot fittings, and transitions inspected and photographed before tile or drywall
- ☐ Photo documentation archived: every rough-in element photographed, indexed by room and elevation, signed by GC and Restrepo PM

QC

QC GATE · 10-ITEM PRE-DRYWALL PASS/FAIL

All 10 items must be PASS before drywall closes. Every item is reviewed by the project lead. Any failed item holds the schedule until resolved.

#	QC GATE ITEM	PASS	FAIL
1	Manufacturer sign-off filed Install docs filed for each modality; AHJ-specific manufacturer noted	PASS / SIGN	FAIL / HOLD
2	NEC 680 GFCI within 5 ft verified GFCI circuit confirmed at plunge and float; 5-ft zone measured and labeled	PASS / SIGN	FAIL / HOLD
3	NFPA 99 combustibles policy posted No-combustibles policy visible in O ₂ and HBOT rooms; document label complete	PASS / SIGN	FAIL / HOLD
4	Sauna clearances per UL 875 Heater clearances verified: 4.92" front and side; 7" floor per UL 875; KID zone	PASS / SIGN	FAIL / HOLD
5	Steam vapor seal water test passed 24-hr flood test on membrane passed; no visible seepage at seams or drains	PASS / SIGN	FAIL / HOLD
6	Cold plunge GFCI within 5 ft NEC 680.5(B) GFCI verified; circuit dedicated; wire gauge confirmed 10 AWG	PASS / SIGN	FAIL / HOLD
7	Float: corrosion-coated coil confirmed Mini-split coil corrosion coating (Mitsubishi Diamond or equiv.) documented	PASS / SIGN	FAIL / HOLD
8	STC ≥ 55 verified at adjacencies Wall assembly at all wellness-to-bedroom partitions confirmed STC ≥ 55	PASS / SIGN	FAIL / HOLD
9	Spare parts ≥ 5% labeled 5% spare hardware for all modalities staged, labeled, delivered to room	PASS / SIGN	FAIL / HOLD
10	Closeout package complete Photo doc, pressure test reports, QC gate signed, warranties filed	PASS / SIGN	FAIL / HOLD

PROJECT LEAD SIGN-OFF

Signature / printed name

DATEMM/DD/YYYY

PROJECT

REF

CITATIONS & PRIMARY SOURCES

- 1 **NJ UCC · Plumbing Subcode (NSPC 2021 adoption)**
NJ DCA primary source for NSPC 2021 adoption as NJ Plumbing Subcode per N.J.A.C. 5:23-3.15.
<https://www.nj.gov/dca/codes/codereg/current.shtml>
- 2 **N.J.A.C. 5:23-3.16 · NJ Electrical Subcode (NEC 2020)**
Cornell LII primary source for NJ Electrical Subcode adopting NEC 2020 with Transitional Items.
<https://www.law.cornell.edu/regulations/new-jersey/N-J-A-C-5-23-3-16>
- 3 **NJ UCC General Information Brochure**
NJ DCA brochure covering IBC 2021 NJ edition Building Subcode adoption.
https://www.nj.gov/dca/codes/publications/pdf_ucc/UCC_gen_info.pdf
- 4 **CO₂ Meter · Oxygen Enrichment and Fire Hazards**
Technical overview of oxygen-enriched atmospheres (OEA) above 23.5% O₂ and associated fire hazard multiplier.
<https://www.co2meter.com/blogs/news/oxygen-enrichment-hazards>
- 5 **NFPA 53 Second Draft Report F2025 · Oxygen-Enriched Atmospheres**
NFPA primary source for materials, equipment, and systems used in oxygen-enriched atmospheres.
https://docinfofiles.nfpa.org/files/AboutTheCodes/53/53_SDR_F2025.pdf
- 6 **Higher Peak Oxygen · Residential O₂ Room Systems**
Manufacturer primary source for residential oxygen room enrichment architecture and PSA delivery systems.
<https://www.higherpeak.com>
- 7 **Hypoxico · Altitude Training Systems**
Manufacturer primary source for Hypoxico residential altitude and oxygen generator product line.
<https://hypoxico.com>
- 8 **CAIRE Inc. · NewLife Intensity O₂ Concentrator**
CAIRE primary source for NewLife Intensity 10 (590 W, 20 psig, 87-96% purity at 2-10 LPM).
<https://www.caireinc.com/product/newlife-intensity/>
- 9 **NFPA 99-2024 · Health Care Facilities Code (Chapters 11, 14)**
NFPA primary source for oxygen system engineering provisions (Ch. 11) and hyperbaric facilities (Ch. 14).
<https://www.nfpa.org/codes-and-standards/nfpa-99>
- 10 **FDA 21 CFR 868.5470 · Full-Body Hyperbaric Chambers**
FDA primary regulatory source classifying full-body hyperbaric chambers as Class II medical devices.
<https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm?fr=868.5470>
- 11 **OxyHealth · Vitaeris 320 HBOT Chamber**
OxyHealth primary source for Vitaeris 320: 1.3 ATA, 32" diameter, 92" length, 110-120 VAC.
<https://www.oxyhealth.com>
- 12 **Summit to Sea · Grand Dive HBOT Chambers**
Summit to Sea primary source for Grand Dive chamber line with redundant compressor systems.
<https://www.summit-to-sea.com>
- 13 **Harvia · KIP 80W 8 kW Sauna Heater**
Harvia primary source for KIP 80W: 240V 1-ph, 33.4A, 50A breaker, 8 AWG copper, UL listed.
<https://www.harvia.com/en-US/products/JH80W2401/kip80w-8-kw-240vac-1ph>
- 14 **UL 875 · Standard for Electric Dry-Bath Heaters**
UL primary source for the product safety standard for electric sauna heaters including clearance requirements.
<https://www.ul.com/resources/ul-875-electric-dry-bath-heaters>
- 15 **NEC 2020 / NFPA 70 · National Electrical Code**
NFPA primary source for NEC 2020: Arts. 210, 422, 680, 310, 300, 334 governing wellness room electrical.
<https://www.nfpa.org/codes-and-standards/nfpa-70>

REF CITATIONS & PRIMARY SOURCES (CONT.)**16 IAEI · NEC Article 422 Appliance Safety**

IAEI primary source for Article 422 disconnect and appliance safety requirements including sauna heaters.
<https://iaeimagazine.org/electrical-fundamentals/using-nec-article-422-to-keep-appliances-and-families-safe/>

17 ASHRAE 62.2-2019/2025 · Residential Ventilation

ASHRAE primary source for dwelling-unit ventilation rate procedure and minimum residential IAQ.
<https://www.ashrae.org/technical-resources/bookstore/standards-62-1-62-2>

18 Mr. Steam · Residential Steam Shower Generators

Mr. Steam primary source for MS series residential generators: 7.5-24 kW at 240V 1-ph.
<https://www.mrsteam.com/products/generators/>

19 ThermaSol · PRO Series III Steam Generator

ThermaSol primary source for PRO Series III steam generator product and installation guides.
<https://www.thermasol.com/products/pro-series-iii>

20 Plunge · All-In Cold Plunge

Plunge primary source: 105 gal, 120V 15A, 1,150 lbs filled, GFCI built-in cord, UV + ozone.
<https://plunge.com/products/plunge-all-in>

21 BlueCube · C2 Cold Plunge Tub

BlueCube primary source: C2 304 SS, 120V 15-20A dedicated, bottom drain, hydro-jet.
<https://bluecubebaths.com/products/c2-cold-plunge-tub>

22 Schluter KERDI · Waterproofing Membrane

Schluter primary source for KERDI polyethylene membrane and KERDI-BAND transition strips.
[https://www.schluter.com/schluter-us/en_US/Membranes/Waterproofing-\(KERDI\)/Schluter%C2%AE-KERDI/p/KERDI](https://www.schluter.com/schluter-us/en_US/Membranes/Waterproofing-(KERDI)/Schluter%C2%AE-KERDI/p/KERDI)

23 Laticrete · Hydro Ban Waterproofing

Laticrete primary source: single-component liquid rubber; ANSI A118.10; 2-hr cure at 70°F.
<https://www.laticrete.com/products/hydro-ban>

24 Float Tank Solutions · Soundproofing Float Tank Installation

Float Tank Solutions primary source for vibration isolation, floating floors, and acoustic separation.
<https://www.floattanksolutions.com/avoiding-soundproofing-mistakes-during-float-tank-installation-dsp-151/>

25 Mitsubishi Electric HVAC · Ducted Mini-Split Systems

Mitsubishi Electric primary source for Diamond Series ducted mini-splits with corrosion-coated coils.
<https://www.mitsubishicomfort.com/products/ducted-solutions>