POLAR BREEZE LLC

Comprehensive Service Agreement

HVAC Design & Commissioning Services

Utah County, Utah · Optimizing Comfort · Elevating Happiness

Polar Breeze LLC is NOT a box-swapper. We solve residential airflow and comfort problems through engineering-grade HVAC design, commissioning, and performance verification. We are residential-only. Designer retains design authority and claim veto authority on all projects.

Project Information

This section completed by Polar Breeze LLC. Professional stamp affixed below upon execution.

Effective Date: _____

Project Address: _____

Client Name: _____

Square Footage: _____

Service Tier: ■ Standard ■ Premium ■ Elite

Total Fee: $ _____

PROFESSIONAL STAMP / SEAL

Polar Breeze LLC professional stamp affixed here upon execution

Pricing Matrix

	Standard	Premium	Elite
Base Fee	$1,000	$3,000	$5,000
Included Sq Ft	Up to 2,500	Up to 4,000	Up to 5,000
Overage Rate (/sq ft)	$0.32	$0.44	$0.55
Equipment Required	Single-Stage	Two-Stage min.	Two-Stage + Zoned, or Modulating
Total Remedy Cap	$10,000	$50,000	$100,000
Pre-Sheetrock Cap	$3,000	$15,000	$30,000
Post-Occupancy Cap	$7,000	$35,000	$70,000

Feature & Options Comparison

Feature	Standard	Premium	Elite
Equipment Type Required	**Single-Stage**	**Two-Stage min.**	**Two-Stage + Zoned, or Modulating**
Manual J Load Calculation	Included	Included	Included
Manual S Equipment Selection	Included	Included	Included
Manual D Duct Design	Basic layout	Full + CFM verification	Full + CFM verification
Manual T Register Selection	Included	Included	Included
Stamped Plans (permit-ready)	1 revision	1 revision	1 revision
Equipment Specifications	Included	Included	Included
Commissioning Report	Basic	CFM, static, delta-T	Full packet + photos
Cooling Guarantee	75°F indoor	73°F indoor	Below 70°F indoor
Heating Guarantee	70°F indoor	72°F indoor	Above 75°F indoor
Temp Delta (zone/floor)	±3°F	±2°F	±1°F
Runtime Test (all tiers)	1°F in 20-40 min	1°F in 20-40 min	1°F in 20-40 min
ADPI Verification	Add-on	Add-on	Add-on
Duct Leakage Test	Add-on (req. if code applies)	Add-on (recommended)	Add-on (required)
Response Time	72 hours	48 hours	24 hours
Scheduling Window	1-14 biz days	1-10 biz days	1-7 biz days
Phone Support	Included	Included	Included
Onsite Visit	Add-on ($275+)	1 included (add'l $275+)	Included (24 mo from cert)
Pre-Sheetrock Testing	Add-on (recommended)	Add-on (recommended)	Included
Final Inspection Attendance	Add-on	Add-on	Included
Unlimited Diagnostics	Add-on	Add-on	Included
Takeover Capability	Add-on	Add-on	Included
Performance Guarantee	Design-error only	Full (when activated)	Full (when activated)
Equipment Warranty Registration	Included	Included	Included

Pricing Adjustments & Add-Ons

- Complex geometries (vaulted ceilings, multi-level): **+15%**
- Rush delivery (<5 business days): **+25%**
- Redesign of existing failed systems: **+20%**
- Multiple HVAC zones: **+$500 per additional zone**
- Additional revisions beyond the included one: **$150/hour**
- Re-stamping fee (after initial stamping): **$250**

IMPORTANT: Performance guarantees activate ONLY when ALL conditions in Section 5 are met. Read the entire Agreement before signing. Without all conditions met, NO performance guarantee applies.

TABLE OF CONTENTS

SECTION 1: DEFINITIONS

The following terms, when capitalized in this Agreement, have the meanings set forth below. Terms not defined herein have their customary meaning within the HVAC industry or as defined by applicable law.

"ACCA"

Air Conditioning Contractors of America, the national trade association that publishes Manual J, Manual S, Manual D, Manual T, and related industry standards for residential and light-commercial HVAC design.

"ADPI"

Air Diffusion Performance Index — a measure of room air mixing effectiveness expressed as a percentage. ADPI ≥80% in every conditioned room where applicable is the Polar Breeze design target and commissioning standard for Elite Tier projects. Where standard ADPI tables do not apply, jet mapping is used for diffuser layout and comfort verification.

"Agreement"

This Comprehensive Service Agreement between Polar Breeze LLC (Designer) and the Client, including all sections, schedules, exhibits, and attachments referenced herein.

"AHJ"

Authority Having Jurisdiction — the governmental entity or official authorized to enforce codes and issue permits for the Project. Typically the local building department or fire marshal.

"Airflow Excellence Principles"

Polar Breeze LLC's proprietary set of design and installation standards, including no plenum-end connections, funnel trunk design, path-of-least-resistance branch runs, balanced supply and return air design, SMACNA-compliant turning vanes, and flex duct discipline. Compliance is mandatory for Performance Guarantee activation.

"Airflow Standards"

The target airflow rates used by Designer: 400 CFM per ton for air conditioners, 500 CFM per ton for heat pumps, 150 CFM per 10,000 BTU for condensing gas furnaces, and 130 CFM per 10,000 BTU for conventional furnaces. These rates ensure optimal heat transfer, humidity control, and equipment longevity.

"Baker's Dozen Program"

Polar Breeze LLC's repeat-customer loyalty program. Client purchases twelve (12) total projects at standard pricing; the thirteenth (13th) project is provided free. The free project is valued at the average cost of the twelve (12) paid projects. Client has a ninety (90) day window from notification to use the free project. Client may upgrade by paying the difference between the free value and the higher-tier price. This program applies to repeat customers (not rooms or maintenance customers).

"Business Day"

Any day other than a Saturday, Sunday, or Utah state-recognized holiday. All scheduling and response windows are measured in Business Days.

"Change Order"

A written modification to the Plans approved by Designer before the change is implemented. Unapproved deviations void the Performance Guarantee.

"Client"

The individual or entity identified on the cover page of this Agreement who engages Designer for HVAC design services. Client may be a homeowner, general contractor, or licensed HVAC contractor.

"Commissioning"

The systematic process of verifying and documenting that the installed HVAC system performs in accordance with the Plans, including CFM measurements, static pressure measurements, temperature delta measurements, ADPI measurements (Elite), and system operational verification.

"Commissioning Data"

The complete set of measurements and test results collected during Commissioning, documented on the CFM & Pressure Test Log (Attachment B), including supply CFM per register, return CFM per grille, static pressure, temperature readings, duct leakage test results (where applicable), and equipment data.

"Commissioning Deliverables"

The tier-specific documentation package delivered upon Commissioning. **Standard:** Manual J report, Manual S report, basic Manual D, stamped Plans, equipment specs. **Premium:** All Standard plus full Manual D with CFM verification, Manual T register selection, commissioning report (CFM per register, static pressure, delta-T), before/after photos. **Elite:** All Premium plus ADPI measurements, jet mapping documentation, duct leakage test results, full commissioning packet, thermal imaging where applicable.

"Core Deliverables"

The primary design outputs included in all Service Tiers: Manual J load calculation report, Manual S equipment selection report, Manual D duct design, Manual T register/grille selection, stamped Plans, and equipment specifications.

"Cure Period"

The period allowed for a defaulting party to correct a breach after receiving written notice. General: 30 calendar days. Payment: 10 Business Days. Safety issues: 5 Business Days.

"Design Conditions"

The outdoor temperature and humidity conditions used for load calculations, based on ACCA climate data for the Project location in Utah County, Utah.

"Designer"

Polar Breeze LLC, a Utah limited liability company, and its authorized representatives. Designer retains design authority and claim veto authority on all projects under this Agreement.

"Deviation"

Any departure by the Installer from the stamped Plans, whether intentional or unintentional, including but not limited to changes in duct sizes, routing, equipment, register locations, or installation methods.

"Effective Date"

The date this Agreement is executed by all parties, as recorded on the cover page.

"Elite Tier"

The highest Service Tier, requiring modulating (variable-speed) or zoned HVAC equipment. Includes pre-sheetrock testing, final inspection attendance, full commissioning report with ADPI and jet mapping, unlimited diagnostics and engineering consultation, takeover capability, 24-hour response time, 1-7 Business Day scheduling, and a $100,000 Remedy Cap ($30,000 pre-sheetrock / $70,000 post-occupancy). Parts and major materials remain billable unless the issue is a verified Polar Breeze design error.

"Equipment"

All HVAC mechanical equipment specified in the Plans, including furnaces, air handlers, condensing units, heat pumps, thermostats, zone controls, humidifiers, dehumidifiers, ERVs, and HRVs.

"Equipment — Single-Stage"

HVAC equipment that operates at one fixed capacity — full on or off. When the thermostat calls for heating or cooling, the system runs at 100% capacity until the setpoint is reached, then cycles off. Single-stage equipment is the minimum requirement for the Standard Tier. Examples include single-stage furnaces, single-stage condensing units, and single-speed air handlers.

"Equipment — Two-Stage"

HVAC equipment that operates at two distinct capacity levels — typically a low stage (approximately 60-70% capacity) and a high stage (100% capacity). The system runs primarily at low stage for mild conditions and switches to high stage during peak demand, providing improved comfort, longer run cycles, better humidity control, and reduced energy consumption. Two-stage equipment is the minimum requirement for the Premium Tier. Two-stage is also the minimum equipment type for true zoning (zone board + dampers + multiple thermostats).

"Equipment — Modulating / Zoned"

HVAC equipment that continuously adjusts its output to match the exact heating or cooling load, also known as variable-speed or inverter-driven equipment. Modulating systems can operate anywhere from approximately 25% to 100% of rated capacity, providing the highest levels of comfort, efficiency, and humidity control. Zoned systems use motorized dampers, bypass arrangements, and multiple thermostats to independently control temperature in different areas of the building. Modulating or zoned equipment is required for the Elite Tier.

"Force Majeure Event"

An event beyond a party's reasonable control that prevents performance, including natural disasters, pandemics, government orders, wars, riots, strikes, embargoes, utility failures, and severe weather. Does not include financial difficulties.

"Guarantee Activation Requirements"

The seven (7) conditions that must ALL be met for Performance Guarantee activation: (1) Premium or Elite Tier selected; (2) Installer Certification Checklist completed; (3) Commissioning Data provided; (4) Pre-sheetrock testing completed (Elite); (5) No unapproved deviations; (6) Client paid in full; (7) Claim within Warranty Period.

"Installed Per Design"

The state in which the HVAC system has been installed in strict accordance with the stamped Plans, with no unapproved Deviations, as verified by the Installer Certification Checklist (Attachment A).

"Installer"

The licensed HVAC contractor engaged by the Client to physically install the HVAC system designed by Polar Breeze LLC.

"Intellectual Property"

All designs, drawings, Plans, calculations, methodologies, and proprietary information created by Designer, including the Airflow Excellence Principles and all design documents.

"Jet Mapping"

A design technique used to predict and verify how conditioned air moves through a room after leaving a supply register. Jet mapping is used where standard ADPI tables do not apply, particularly in rooms with unusual geometries,

high ceilings, or atypical register placements. Used for diffuser layout and comfort verification in Elite Tier designs.

"Manual D"

ACCA Manual D — Residential Duct Systems, the standard for duct sizing and layout design.

"Manual J"

ACCA Manual J, 8th Edition — Residential Load Calculation, the standard for room-by-room heating and cooling load calculations.

"Manual S"

ACCA Manual S — Residential Equipment Selection, the standard for matching equipment capacity to calculated loads.

"Manual T"

ACCA Manual T — Air Distribution Basics, the standard for register and grille selection and placement.

"Measurement Protocol"

The standardized procedure for taking performance measurements: calibrated digital thermometers (±0.5°F, NIST-traceable), 3 feet above floor at room center, after 2+ hours of continuous system operation, doors open, windows and exterior doors closed, outdoor temperatures within 10°F of Design Conditions.

"Notice"

A formal communication required under this Agreement, delivered via certified mail (return receipt requested), nationally recognized overnight courier, or email with delivery confirmation. Notice is effective upon receipt.

"Performance Guarantee"

Designer's guarantee that, when all Guarantee Activation Requirements are met, the installed HVAC system will meet the temperature, comfort, and ADPI standards specified for the applicable Service Tier.

"Plans"

The complete set of stamped HVAC design documents prepared by Designer, including duct layouts, equipment specifications, register/grille schedules, load calculations, and all supporting documentation.

"Post-Occupancy Cap"

The portion of the Remedy Cap allocated to performance issues discovered after drywall installation: $7,000 (Standard), $35,000 (Premium), or $70,000 (Elite).

"Pre-Sheetrock Cap"

The portion of the Remedy Cap allocated to design corrections before drywall installation: $3,000 (Standard), $15,000 (Premium), or $30,000 (Elite).

"Premium Tier"

The mid-level Service Tier, requiring two-stage HVAC equipment. Includes one free onsite visit, 48-hour response time, 1-10 Business Day scheduling, commissioning report with CFM verification, and a $50,000 Remedy Cap ($15,000 pre-sheetrock / $35,000 post-occupancy).

"Project"

The specific construction or renovation project identified on the cover page for which Designer provides HVAC design services.

"RACI"

Responsibility Assignment Matrix: R = Responsible (performs work), A = Accountable (owns the outcome), C = Consulted (provides input), I = Informed (notified of results).

"Remedy Cap"

The maximum aggregate financial liability of Designer for all remedy work under the Performance Guarantee during the Warranty Period: $10,000 (Standard), $50,000 (Premium), or $100,000 (Elite).

"Remedy Work"

Corrective work performed to address verified performance deficiencies covered by the Performance Guarantee, authorized by Designer's Corrective Action Plan.

"Standard Tier"

The entry-level Service Tier, requiring single-stage HVAC equipment. Includes Manual J/S/D/T, basic duct layout, stamped Plans, 72-hour response, 1-14 Business Day scheduling, and a $10,000 design-error Remedy Cap ($3,000 pre-sheetrock / $7,000 post-occupancy). No Performance Guarantee activation.

"Utah 2024 Building Code"

As of July 1, 2024, Utah's residential energy code requires duct leakage testing when the furnace/air handler or any portion of the duct system is outside the thermal envelope. Code also requires indoor heating, cooling, and ventilation equipment (including ductwork) to be inside the building thermal envelope. Polar Breeze designs align with these requirements. Many existing homes do not meet this standard.

"Warranty Period"

Six (6) years from the date of final Commissioning (or substantial completion if Commissioning is not performed), corresponding to the Utah statute of limitations for construction defects.

"Work Package"

A discrete scope of work within the Project, as identified in the RACI Responsibility Matrix (Section 3).

"Wrightsoft"

Wrightsoft Right-Suite Universal, the ACCA-certified software used by Polar Breeze LLC for all HVAC design calculations.

SECTION 2: SCOPE OF WORK

This Section establishes the comprehensive scope of HVAC design services provided by Polar Breeze LLC ("Designer") under this Agreement. The scope encompasses all design, calculation, documentation, coordination, and support activities necessary to deliver a complete, permit-ready HVAC design for the Project.

Identity Statement: Polar Breeze LLC is a residential-only HVAC design firm. We are not a box-swapper — we solve residential airflow and comfort problems through engineering-grade HVAC design, commissioning, and performance verification. Designer retains design authority and claim veto authority on all projects.

2.1 Design Standards & Methodology

All HVAC design work shall comply with the following standards, which represent the highest level of professional practice in residential HVAC design:

2.1.1 Primary Design Standards

ACCA Manual J, 8th Edition (Residential Load Calculation). All heating and cooling load calculations are performed using the current 8th Edition of ACCA Manual J on a room-by-room basis. Manual J accounts for building envelope characteristics including wall construction, insulation R-values, window types and orientations, roof construction, foundation type, infiltration rates, and internal heat gains from occupants and equipment.

ACCA Manual S (Residential Equipment Selection). Equipment is selected in strict accordance with Manual S, matching equipment capacity to calculated loads. Manual S ensures equipment is neither oversized (causing short cycling and poor humidity control) nor undersized (unable to meet heating or cooling needs under Design Conditions).

ACCA Manual D (Residential Duct Systems). All duct system designs follow Manual D procedures for sizing ductwork to deliver the required CFM to each room. Designer employs the Airflow Excellence Principles in conjunction with Manual D for superior duct performance.

ACCA Manual T (Air Distribution Basics). Register and grille selection and placement are governed by Manual T criteria for throw distance, spread, terminal velocity, noise criteria, and room air mixing patterns.

2.1.2 Airflow Standards

Airflow rates are determined by Designer based on expected outcomes, system configuration, equipment specifications, and site conditions. Industry reference rates serve as baseline guidelines; actual design targets may vary to achieve optimal performance for the specific project.

- **Air Conditioners:** ~400 CFM per ton of cooling capacity (baseline guideline).
- **Heat Pumps:** ~500 CFM per ton of capacity (baseline guideline).
- **Condensing Gas Furnaces:** ~150 CFM per 10,000 BTU output (baseline guideline).
- **Conventional Gas Furnaces:** ~130 CFM per 10,000 BTU output (baseline guideline).

These industry reference rates are starting points. Designer adjusts actual airflow targets based on duct system configuration, equipment performance data, and site-specific conditions to achieve optimal comfort and efficiency. Proper airflow is the single most important factor in system longevity, efficiency, and comfort.

2.1.3 ADPI & Jet Mapping Standards

Air Diffusion Performance Index (ADPI) is a measure of room air mixing effectiveness. Polar Breeze targets ADPI ≥80% in every conditioned room where applicable. ADPI is measured during commissioning for Elite Tier projects and documented in the commissioning packet.

Jet Mapping (Flow Mapping) is used for diffuser layout and comfort verification where the ADPI ≥80% method is not recommended for the space, such as rooms with unusual geometries, high ceilings, or atypical register placements. Jet mapping predicts how conditioned air moves through a room and ensures adequate air mixing throughout the occupied zone. Jet mapping is NOT included in any tier's base price; it is available as an add-on at Designer's hourly rate ($200/hour).

ADPI Verification is always an add-on service at additional cost, regardless of Service Tier. It is not included in the base price for any tier.

2.1.4 Supplementary Standards

In addition to the primary ACCA Manuals, all designs comply with:

- **IECC** as adopted by Utah — equipment efficiency, duct insulation, duct sealing, fenestration requirements.
- **IRC / IMC** — mechanical system requirements, ventilation, combustion air, mechanical safety.
- **SMACNA HVAC Duct Construction Standards** — duct fabrication, materials, gauges, reinforcement, sealing.
- **ASHRAE Fundamentals Handbook** — psychrometric data, outdoor design conditions, engineering references.
- **ASHRAE Standard 62.2** — residential ventilation requirements and outdoor air rates.
- **Utah 2024 Building Code** — as of July 1, 2024, requires duct leakage testing when furnace/air handler or any portion of duct system is outside the thermal envelope; requires equipment and ductwork inside the thermal envelope. Polar Breeze designs align with these requirements.

2.2 Load Calculation Process

The load calculation process is the foundation of all HVAC design work. Polar Breeze LLC follows a meticulous, multi-step process:

2.2.1 Information Gathering

Designer collects all necessary information from Client, including architectural drawings, construction specifications, insulation schedules, window schedules (type, size, U-value, SHGC), door schedules, wall and roof construction details, foundation type, ceiling heights, room names and intended uses, and any special features (skylights, sunrooms, bonus rooms).

2.2.2 Room-by-Room Calculations

Manual J calculations are performed on a room-by-room basis, generating individual heating and cooling loads for each room. This ensures rooms with higher loads receive proportionally more conditioned air while rooms with lower loads are not overconditioned. The calculated loads drive the required CFM for each room, which determines duct sizes and register selections.

2.2.3 Whole-Building Summary

After completing room-by-room calculations, Designer generates a whole-building load summary including peak loads, diversity factors, and total sensible and latent cooling loads. This summary is the primary input for Manual S equipment selection.

2.3 Equipment Selection Criteria

Equipment selection follows ACCA Manual S with these governing criteria:

- **Cooling:** Total capacity at design conditions shall not exceed 115% of calculated cooling load per Manual S.
- **Heating:** Capacity at design conditions within 100% to 140% of calculated heating load.

- **Airflow:** Equipment must deliver total required CFM at design external static pressure.
- **Efficiency:** All equipment meets or exceeds IECC minimum efficiency ratings (SEER, EER, AFUE, HSPF).
- **Refrigerant:** Equipment compatible with current and transitional refrigerants (R-454B, R-32, R-410A, R-22 for replacements).
- **Tier-Specific Equipment:** Standard requires single-stage; Premium requires two-stage minimum; Elite requires two-stage AND zoned, or modulating. Single-stage cannot be zoned.
- **Manufacturer Quality:** Equipment from established manufacturers with AHRI-certified performance data and robust warranties.

2.4 Duct Design Principles

Duct system design is performed per ACCA Manual D, supplemented by Polar Breeze LLC's proprietary Airflow Excellence Principles.

2.4.1 Trunk Design — Funnel Methodology

All trunk duct lines use the funnel methodology — progressive reduction in cross-sectional area as branches are taken off. This maintains consistent air velocity, prevents excessive noise, and ensures balanced airflow distribution.

2.4.2 Plenum Connections

All supply and return duct connections to the plenum shall be at the sides or bottom only. End connections are strictly prohibited as they create turbulence, uneven airflow distribution, and excessive pressure drop.

2.4.3 Branch Run Design

Branch runs use the path-of-least-resistance approach: minimizing turns and transitions, using smooth radius elbows, limiting flex duct to shortest practical length with no more than 10% compression, and supporting all ductwork every four (4) feet.

2.4.4 Return Air Design

Return air systems are designed to provide adequate return air capacity on every floor and zone, with balanced supply-to-return ratios. Inadequate return air is the most common cause of comfort complaints in residential HVAC systems.

2.5 Airflow Excellence Principles

These proprietary standards, developed over 20+ years of HVAC field experience, are mandatory for Performance Guarantee activation:

- **No Plenum-End Connections:** All duct connections at plenum sides or bottom only.
- **Funnel Trunk Design:** Progressive trunk size reductions; constant-size trunk runs prohibited.
- **Path of Least Resistance:** Minimum friction loss with fewest turns and shortest lengths.
- **Balanced Return Air:** Adequate return air capacity on every floor and zone, with balanced supply-to-return ratios.
- **SMACNA Turning Vanes:** Required in all elbows; max one 90° turn per run without vanes.
- **Flex Duct Discipline:** No more than 10% compression, support every 4 feet, inner liner tight, no kinks.
- **Sealing Integrity:** All joints sealed with UL 181-rated mastic or metal tape. Cloth-backed duct tape prohibited.

2.6 Register & Grille Selection

Supply registers and return grilles are selected per ACCA Manual T:

- **Supply:** Adjustable, directional throw registers sized for NC ≤ 25 (bedrooms) or ≤ 30 (living areas).
- **Supply Placement:** Ceiling or high side wall ONLY. No floor-mounted supply registers.
- **Return:** Fixed, stamped or bar-type grilles sized for face velocity ≤ 300 FPM to minimize noise.
- **Return Placement:** Low wall placement. Gravity assists return air flow.
- **No Substitutions:** Installer shall not substitute smaller registers than specified without a Change Order.
- **Placement Rationale:** Register locations are intentionally selected based on room geometry and system type. Changes require written approval.

Benefits of ceiling/high-wall supply and low-wall return placement: Improved air quality, easier cleaning and maintenance, no obstruction from furniture, toys, or construction debris, gravity assists return air flow, and no items falling into floor registers.

2.7 Permit-Ready Documentation

Designer prepares all documentation necessary for HVAC permit submission:

- Stamped Plans bearing Designer's professional seal certifying ACCA and code compliance.
- Manual J load calculation report (room-by-room and building summary).
- Manual S equipment selection report with capacity verification.
- Manual D duct design drawings with sizing table and static pressure budget.
- Equipment cut sheets for all major equipment specified.
- Energy code compliance documentation (IECC compliance path).
- Register and grille schedule with types, sizes, and locations.

2.8 Commissioning Deliverables by Tier

The following documentation is provided based on the selected Service Tier:

2.8.1 Standard Tier Deliverables

- Manual J report (room-by-room and building summary).
- Manual S report (equipment selection and capacity verification).
- Basic Manual D duct layout with sizing.
- Stamped Plans (permit-ready).
- Equipment specifications.

2.8.2 Premium Tier Deliverables

All Standard deliverables plus:

- Full Manual D with CFM verification table.
- Manual T register selection documentation.
- Commissioning report: CFM per register, static pressure, delta-T.
- Before/after photos of ductwork and installation.

2.8.3 Elite Tier Deliverables

All Premium deliverables plus:

- ADPI measurements for all conditioned rooms where applicable.

- Jet mapping documentation for rooms requiring non-standard analysis.
- Duct leakage test results.
- Full commissioning packet.
- Thermal imaging documentation where applicable.

2.9 Utah 2024 Building Code Compliance

As of July 1, 2024, Utah's residential energy code requires duct leakage testing when the furnace/air handler or any portion of the duct system is located outside the thermal envelope. The code also requires indoor heating, cooling, and ventilation equipment (including ductwork) to be inside the building thermal envelope.

Polar Breeze designs align with these requirements. Many existing homes do not meet this standard, which is why issues often surface when Polar Breeze evaluates or corrects existing ductwork. Designer's commissioning process includes duct leakage testing where required by the 2024 Utah code.

2.10 Coordination with Other Trades

Successful HVAC installation requires coordination with framing, electrical, plumbing, insulation, and drywall. Designer's coordination responsibilities include:

- Identifying conflicts between duct routing and structural elements (beams, headers, trusses).
- Noting clearance requirements for equipment installation, combustion air, and service access.
- Specifying chase and soffit requirements for trunk duct concealment.
- Identifying duct penetrations through fire-rated assemblies requiring fire dampers.
- Coordinating duct routing with plumbing drain and vent locations.
- Communicating scheduling requirements for pre-sheetrock HVAC inspection to the GC.
- Providing guidance regarding thermostat locations and low-voltage wiring routing.

2.11 Post-Installation Services

- **All Tiers — Phone Support:** Designer available for phone consultation during inspections and start-up.
- **Premium — One Included Onsite Visit:** Visual inspection of installation compliance; written summary within 5 Business Days. Additional visits start at $275 (covers first trip + up to 2.5 hours onsite + basic testing); goes up from there depending on scope and what is approved.
- **Elite — Pre-Sheetrock Testing:** Onsite inspection and preliminary airflow testing before drywall. Guarantee Activation Requirement.
- **Elite — Final Inspection Attendance:** Designer attends AHJ final inspection if requested.
- **Elite — Full Commissioning Report:** Comprehensive report documenting all performance measurements, ADPI, and jet mapping results.
- **Elite — Unlimited Diagnostics:** Unlimited diagnostic and engineering consultation included. Parts and major materials still billable unless issue is a verified Polar Breeze design error.
- **Elite — Takeover Capability:** Designer can take over problem resolution when needed.

2.12 Revision Process

One (1) design revision is included in all Service Tiers. Additional revisions: $150/hour. Re-stamping fee: $250. Fundamental scope changes (layout changes, additional zones, footprint changes) require a separate quote.

2.13 Communication Protocols

- **Primary Communication:** Email for all substantive design correspondence, approvals, and Change Orders.
- **Response Times:** Standard (72 hours), Premium (48 hours), Elite (24 hours), excluding Sundays and holidays.
- **Scheduling Windows:** Standard (1-14 Business Days), Premium (1-10 Business Days), Elite (1-7 Business Days).
- **Emergency Contact:** Direct phone number for urgent installation issues requiring immediate design clarification.

2.14 Exclusions

The following items are expressly excluded from the Scope of Work:

- Physical installation of HVAC equipment, ductwork, or components (Installer's responsibility).
- Procurement of equipment, materials, and supplies.
- Refrigerant line sizing, installation, and charging (Installer's responsibility per manufacturer specifications).
- Electrical wiring and connections (licensed electrician's responsibility).
- Gas piping and connections (licensed plumber or gas fitter's responsibility).
- Structural modifications required for duct routing (General Contractor's responsibility).
- Permit application submission and fees (Client's responsibility).
- Building envelope modifications unless specifically contracted.
- Indoor air quality testing, mold remediation, or environmental assessments.
- Post-installation maintenance, filter replacement, or ongoing service (see Section 13 for maintenance-guarantee link).

SECTION 3: RESPONSIBILITY MATRIX (RACI)

This matrix assigns responsibilities for all major Work Packages under this Agreement. **R** = Responsible (performs the work); **A** = Accountable (final decision authority); **C** = Consulted (provides input before action); **I** = Informed (notified after action). Where a party has no involvement, the cell shows a dash (—).

Work Package	Polar Breeze	Installer	Client	General Contractor	AHJ	Mfr	3rd-Party Tester	Insurance
Initial Consultation & Needs Assessment	R	I	A	C	—	—	—	—
Architectural Drawing Review & Site Survey	R	C	A	C	—	—	—	—
Manual J Load Calculation	R	I	C	I	—	—	—	—
Manual S Equipment Selection	R	C	A	I	—	C	—	—
Manual D Duct Design & Manual T Register Selection	R	C	I	C	—	I	—	—
ADPI / Jet Mapping Analysis (Elite)	R	I	I	—	—	—	—	—
Stamped Plan Preparation & Delivery	R	I	A	I	I	—	—	—
Permit Application & Plan Review	C	I	A	R	A	—	—	—
Equipment & Material Procurement	C	R	A	C	—	R	—	—
Duct Installation (Trunk, Branch, Flex)	C	R	I	C	I	—	—	—
Equipment & Controls Installation	C	R	I	C	I	C	—	—
Sealing, Insulation & Register Installation	C	R	I	I	I	—	—	—
Pre-Close Inspection / Pre-Sheetrock Test	R	A	I	C	—	—	C	—
System Start-Up & Airflow Balancing	C	R	I	I	—	C	—	—
CFM Verification & Static Pressure Testing	A	R	I	I	—	—	R	—
Duct Leakage Testing (per Utah 2024 Code)	A	R	I	I	I	—	R	—
Temperature & Performance Verification	A	R	I	I	—	—	R	—
Final AHJ Inspection	C	R	I	A	R	—	—	—
Commissioning Report & Warranty Registration	R	R	A	I	—	A	—	—
Warranty Claim Investigation & Remedy Work	A	R	A	I	—	C	R	I

Notes: (1) The RACI designations above are typical for residential new construction. Renovation or commercial projects may modify assignments by mutual agreement. (2) Where no General Contractor is involved, the Client assumes GC responsibilities. (3) Insurance/Bonding applies primarily to bonded projects. (4) Failure to fulfill RACI responsibilities may affect the Performance Guarantee.

SECTION 4: SERVICE TIERS & PRICING

This Section establishes the three (3) Service Tiers offered by Polar Breeze LLC, their respective inclusions, pricing structures, equipment requirements, remedy cap allocations, payment terms, loyalty programs, and the refund policy. The Client selects one (1) Service Tier at Agreement execution.

4.1 Tier Comparison Summary

The following table provides a comprehensive comparison of the three Service Tiers:

Feature	Standard Tier	Premium Tier	Elite Tier
Equipment Required	**Single-Stage**	**Two-Stage min.**	**Two-Stage + Zoned, or Modulating**
Manual J Load Calculation	Included	Included	Included
Manual S Equipment Selection	Included	Included	Included
Manual D Duct Design	Basic layout	Full with CFM verification table	Full with CFM verification table
Manual T Register Selection	Included	Included	Included
Stamped Plans (permit-ready)	1 revision included	1 revision included	1 revision included
Equipment Specifications	Included	Included	Included
Response Time	72 hours	48 hours	24 hours
Scheduling Window	1-14 Business Days	1-10 Business Days	1-7 Business Days
Phone Support	Included	Included	Included
Onsite Visits	Add-on ($275+)	1 included (add'l $275+)	Included (24 mo from cert)
Pre-Sheetrock Testing	Add-on (recommended)	Add-on (recommended)	Included
Final Inspection Attendance	Add-on	Add-on	Included
Full Commissioning Report	Add-on	CFM, static, delta-T	Full packet
ADPI Measurement	Add-on	Add-on	Add-on
Duct Leakage Test	Add-on (req. if code applies)	Add-on (recommended)	Add-on (required)
Thermal Imaging	Add-on	Add-on	Where applicable
Unlimited Diagnostics	Add-on	Add-on	Included
Takeover Capability	Add-on	Add-on	Included
Equipment Warranty Registration	Included	Included	Included
Performance Guarantee	Design-error only	Full (when activated)	Full (when activated)
Total Remedy Cap	$10,000	$50,000	$100,000

4.2 Pricing Structure

4.2.1 Standard Tier Pricing

Base Fee: $1,000 for projects up to 2,500 square feet. For projects exceeding 2,500 square feet, an overage rate of **$0.32 per square foot** applies to every square foot over 2,500. Example: A 3,500 sq ft project = $1,000 + (1,000 x $0.32)

= **$1,320**.

Equipment Requirement: The Standard Tier requires **single-stage HVAC equipment**. Single-stage equipment operates at one fixed capacity — full on or off. Single-stage equipment CANNOT be zoned (no zone boards or dampers). Multiple single-stage units serving different floors constitute separate systems, not a "zoned" system. Multiple systems in the Standard Tier incur additional per-system charges but do not require a tier upgrade.

4.2.2 Premium Tier Pricing

Base Fee: $3,000 for projects up to 4,000 square feet. For projects exceeding 4,000 square feet, an overage rate of **$0.44 per square foot** applies to every square foot over 4,000. Example: A 5,000 sq ft project = $3,000 + (1,000 x $0.44) = **$3,440**.

Equipment Requirement: The Premium Tier requires **two-stage HVAC equipment**. Two-stage equipment operates at two capacity levels — a low stage (~60-70%) and high stage (100%). This provides improved comfort, longer run cycles, better humidity control, and reduced energy consumption. The enhanced temperature guarantees under this tier (73°F indoor cooling, 72°F heating, ±2°F delta) require the superior performance characteristics of two-stage equipment.

4.2.3 Elite Tier Pricing

Base Fee: $5,000 for projects up to 5,000 square feet. For projects exceeding 5,000 square feet, an overage rate of **$0.55 per square foot** applies to every square foot over 5,000. Example: A 7,000 sq ft project = $5,000 + (2,000 x $0.55) = **$6,100**.

Equipment Requirement: The Elite Tier requires **two-stage AND zoned, OR modulating (zoned or not) HVAC equipment**. Single-stage equipment cannot be used in any form for Elite Tier. Modulating systems continuously adjust capacity to match the exact heating or cooling load, providing the highest level of comfort, efficiency, and humidity control. Zoned systems use motorized dampers and multiple thermostats to independently control temperature in different areas of the building. The superior temperature guarantees under this tier (below 70°F cooling, above 75°F heating, ±1°F delta) are achievable only with modulating or two-stage zoned equipment operating as designed.

Elite Includes Unlimited Diagnostics and Engineering Consultation. Designer can take over problem resolution ("takeover capability") when needed. Included onsite visits stop at **24 months from certification completion date**. However, **parts and major materials remain billable** unless the issue is truly a verified Polar Breeze design error. This distinction is critical — the Elite Tier covers Designer's time and expertise, but hardware costs resulting from non-design issues remain the Client's or Installer's responsibility.

4.2.4 Pricing Adjustments

The following adjustments apply to the calculated base fee:

- Complex geometries (vaulted ceilings, multi-level): **+15%** of base fee.
- Rush delivery (less than 5 Business Days): **+25%** of base fee.
- Redesign of existing failed systems: **+20%** of base fee.
- Multiple HVAC zones: **+$500 per additional zone** beyond the first.

4.3 Remedy Cap Allocation

The Remedy Cap represents Designer's maximum aggregate financial liability for all remedy work under the Performance Guarantee during the Warranty Period. Remedy Caps are allocated as follows:

Tier	Total Remedy Cap	Pre-Sheetrock Cap	Post-Occupancy Cap
Standard	$10,000	$3,000	$7,000

Tier	Total Remedy Cap	Pre-Sheetrock Cap	Post-Occupancy Cap
Premium	$50,000	$15,000	$35,000
Elite	$100,000	$30,000	$70,000

Pre-Sheetrock Cap Covers:

- Duct rerouting, resizing, or relocation before drywall.
- Additional returns or supplies required by design correction.
- Equipment upgrades if original specification was undersized.
- Design revisions and associated labor and materials.

Post-Occupancy Cap Covers:

- Temperature balancing failures after occupancy.
- Uneven comfort issues traced to design error.
- Drywall removal and repair if duct access is required.
- Labor and materials for post-occupancy performance remedies.

Standard Tier Note: The Standard Tier $10,000 Remedy Cap ($3,000 pre-sheetrock / $7,000 post-occupancy) covers design errors only. The Performance Guarantee does not activate for Standard Tier — only the design-error cap applies. Standard Tier requires single-stage equipment.

4.4 Payment Terms

Payment terms apply to all Service Tiers:

- **Deposit:** 50% of the total fee due at Agreement execution. Design work begins only after deposit receipt.
- **Balance:** Remaining 50% due upon delivery of stamped Plans.
- **Late Payment:** Interest accrues at 1.5% per month (18% per annum) on balances overdue by more than 30 days.
- **Collections:** If payment is referred to collections, Client is responsible for all collection costs including reasonable attorney fees.
- **Payment Methods:** Check, ACH transfer, credit/debit card (3% processing fee applies to card payments), or Venmo/Zelle.

4.5 Tier Selection & Changes

Client selects one Service Tier at Agreement execution as indicated on the cover page. Tier upgrades may be requested before stamped Plans are delivered; a prorated fee difference applies. Tier downgrades after the initial deposit is paid are not permitted.

4.5a Equipment Make, Model & Brand Requests

Installer, General Contractor, or Client may request specific equipment make, model, and brand for any project.

- **Request Process:** Requests must be communicated to Designer in writing before equipment procurement.
- **Designer Consideration:** Designer will consider all requests but may recommend alternatives if the request conflicts with design calculations, performance goals, or the Airflow Excellence Principles.
- **Budget-Driven Substitutions:** Budget-driven equipment substitutions are understood. Designer will work with Client to find appropriate alternatives that meet design parameters within the stated budget.

- **Performance Impact:** Equipment substitutions that differ from Designer's original specification may affect performance outcomes and may adjust the scope of the Performance Guarantee. Designer will clearly communicate any such adjustments before the substitution is approved.
- **Evaporative Coils:** Evaporative coils must be listed individually alongside equipment at all design stages for warranty purposes.

4.6 Pricing Examples

The following examples illustrate how fees are calculated for various project sizes:

Project Size	Standard	Premium	Elite
2,000 sq ft	$1,000 (base)	$3,000 (base)	$5,000 (base)
2,500 sq ft	$1,000 (base)	$3,000 (base)	$5,000 (base)
3,000 sq ft	$1,000 + (500 x $0.32) = $1,160	$3,000 (base)	$5,000 (base)
3,500 sq ft	$1,000 + (1,000 x $0.32) = $1,320	$3,000 (base)	$5,000 (base)
4,000 sq ft	$1,000 + (1,500 x $0.32) = $1,480	$3,000 (base)	$5,000 (base)
4,500 sq ft	$1,000 + (2,000 x $0.32) = $1,640	$3,000 + (500 x $0.44) = $3,220	$5,000 (base)
5,000 sq ft	$1,000 + (2,500 x $0.32) = $1,800	$3,000 + (1,000 x $0.44) = $3,440	$5,000 (base)
6,000 sq ft	$1,000 + (3,500 x $0.32) = $2,120	$3,000 + (2,000 x $0.44) = $3,880	$5,000 + (1,000 x $0.55) = $5,550
7,500 sq ft	$1,000 + (5,000 x $0.32) = $2,600	$3,000 + (3,500 x $0.44) = $4,540	$5,000 + (2,500 x $0.55) = $6,375
10,000 sq ft	$1,000 + (7,500 x $0.32) = $3,400	$3,000 + (6,000 x $0.44) = $5,640	$5,000 + (5,000 x $0.55) = $7,750

Note: These examples do not include pricing adjustments for complex geometries (+15%), rush delivery (+25%), redesigns (+20%), or additional zones (+$500/zone). Final fee is calculated on the cover page based on the specific Project.

4.7 Baker's Dozen Program (Repeat Customers)

Polar Breeze LLC rewards repeat customers through the Baker's Dozen Program:

- **Qualification:** Client purchases twelve (12) total projects at standard pricing.
- **Reward:** The thirteenth (13th) project is provided **FREE**.
- **Value:** The free project is valued at the **average cost** of the twelve (12) paid projects.
- **Use Window:** Client has **ninety (90) days** from notification to use the free project.
- **Upgrade Option:** Client may upgrade the free project by paying the difference between the free value and the higher-tier price.
- **Eligibility:** This program is for **repeat customers only** — not individual rooms, not maintenance customers.

Example: Client completes 12 projects with an average fee of $2,500. The 13th project (up to $2,500 value) is free. If the 13th project would cost $3,200, Client pays only the $700 difference.

4.8 Refund Policy

The following refund provisions apply to all Service Tiers:

- **Before design work begins:** Full refund of deposit minus a $150 administrative fee.
- **During design (before Plans delivered):** 50% refund of total fees paid, minus Designer's actual costs incurred.

- **After Plans delivered:** No refund — Plans are considered fully-performed services.
- **After Commissioning:** No refund of any portion of the fee.
- **Refund timeline:** All refunds processed within thirty (30) days of the refund request.

SECTION 5: PERFORMANCE GUARANTEES

This Section establishes the Performance Guarantee standards, activation requirements, measurement protocols, ADPI standards, and the conditions under which Designer guarantees HVAC system performance.

5.1 Guarantee Activation Requirements

CRITICAL: The Performance Guarantee activates ONLY when ALL seven (7) of the following conditions are met. Partial compliance does NOT activate the guarantee. Without ALL conditions met, NO performance guarantee applies.

1. **Premium or Elite Tier selected** — the Standard Tier does not include Performance Guarantee activation.
2. **Installer Certification Checklist (Attachment A)** completed, signed, and submitted to Designer, certifying Installed Per Design compliance.
3. **Commissioning Data (Attachment B)** provided, showing CFM measurements, static pressure, and temperature readings at all registers.
4. **Pre-Sheetrock Testing completed** (Elite Tier only) — pre-sheetrock inspection and testing documented before drywall installation.
5. **No unapproved Deviations** — all Deviations from Plans documented and approved in writing by Designer via Change Order.
6. **Client paid Designer in full** — all invoices paid with no outstanding balances.
7. **Claim submitted within the Warranty Period** — six (6) years from final Commissioning date.

Without ALL conditions met, NO performance guarantee applies regardless of Service Tier. This is not a negotiable provision — it is the foundation of the Performance Guarantee.

5.2 Temperature Performance Standards

When all Guarantee Activation Requirements are met, Designer guarantees the following temperature performance standards based on the selected Service Tier and the associated equipment type:

5.2.1 Standard Tier — Industry Standards (Single-Stage Equipment)

The Standard Tier provides industry-standard comfort levels using **single-stage equipment**. No Performance Guarantee activation (only design-error Remedy Cap applies). Reference standards for information:

- Cooling setpoint: **75°F** (system maintains thermostat setpoint during cooling).
- Heating setpoint: **70°F** (system maintains thermostat setpoint during heating).
- Temperature delta: Up to **3°F** between rooms on the same zone or floor.

5.2.2 Premium Tier — Enhanced Comfort (Two-Stage Equipment Required)

The Premium Tier guarantees enhanced comfort with tighter temperature control, achievable through **two-stage equipment**:

- Cooling: System maintains **73°F indoor** cooling temperature.
- Heating setpoint: **72°F** (system maintains 72°F during heating).
- Temperature delta: Up to **2°F** between rooms on the same zone or floor.

5.2.3 Elite Tier — Ultimate Comfort (Modulating/Zoned Equipment Required)

The Elite Tier guarantees the highest level of comfort with the tightest temperature control, achievable only with **modulating (variable-speed) or zoned HVAC equipment**:

- Cooling: System cools **below 70°F** — ultimate cooling performance.
- Heating: System heats **above 75°F** — maximum heating comfort.
- Temperature delta: **1°F** maximum between rooms on the same zone or floor.

5.2.4 All Tiers — Runtime Performance Requirement

ALL TIERS: The HVAC system must demonstrate the ability to **drop 1°F within 20-40 minutes** of continuous runtime. This runtime test verifies that the system can actively condition the space at an acceptable rate. All other contract conditions (Installed Per Design verification, Commissioning Data, etc.) must also be met for any guarantee or remedy to apply.

5.3 ADPI Performance Standards

Air Diffusion Performance Index (ADPI) is a measure of room air mixing effectiveness. Polar Breeze LLC uses ADPI as an explicit design and commissioning standard:

- **Target:** ADPI ≥80% in every conditioned room where applicable.
- **Measurement:** ADPI is measured during Elite Tier commissioning and documented in the commissioning packet.
- **Jet Mapping:** Where standard ADPI tables do not apply (unusual geometries, high ceilings, atypical registers), jet mapping is used for diffuser layout and comfort verification.
- **Scope:** ADPI is an explicit design/commissioning standard for Elite projects, not just a background concept. It provides verifiable proof that the air distribution system delivers conditioned air effectively to the occupied zone.

5.4 Performance Guarantee Summary

Parameter	Standard	Premium	Elite
Equipment Required	Single-Stage	Two-Stage min.	Two-Stage + Zoned, or Modulating
Cooling	75°F setpoint	73°F indoor	Below 70°F
Heating	70°F setpoint	72°F setpoint	Above 75°F
Room Delta	≤ 3°F per zone/floor	≤ 2°F per zone/floor	≤ 1°F per zone/floor
Runtime Test	1°F drop in 20-40 min	1°F drop in 20-40 min	1°F drop in 20-40 min
ADPI Standard	Add-on	Add-on	Add-on
Guarantee Active?	No (design-error only)	Yes (when activated)	Yes (when activated)
Remedy Cap	$10,000	$50,000	$100,000

5.5 Measurement Protocol

All temperature and airflow measurements used for Performance Guarantee verification must follow this standardized protocol:

- Calibrated digital thermometers with accuracy of ±0.5°F or better, NIST-traceable calibration within 12 months.
- Temperature measurements taken at 3 feet above floor, at the center of each room.
- System must have operated continuously for at least 2 hours before measurements are taken.
- All interior doors open during measurement (normal occupancy conditions).
- All windows and exterior doors closed.

- Outdoor temperatures within 10°F of Design Conditions for the applicable mode (heating or cooling).
- CFM measurements taken with a calibrated flow hood; three readings per register averaged.
- Static pressure measured at the equipment using a calibrated manometer (±0.01 in. wg accuracy).

5.6 Guarantee Exclusions

The Performance Guarantee does NOT cover:

- Performance failures caused by Installer Deviations from the Plans (installation errors are Installer's liability).
- Equipment malfunctions, manufacturing defects, or improper refrigerant charge (Manufacturer/Installer responsibility).
- Changes to the building envelope after design completion (additions, window replacements, insulation changes).
- Failure to maintain the HVAC system per manufacturer's maintenance schedule (Client's responsibility).
- Conditions outside manufacturer's rated operating range (extreme temperatures beyond equipment specs).
- Rooms or areas added to the building after design completion without Design redesign.
- Performance issues caused by Client modifications to the system (closing registers, blocking returns, etc.).
- Damage caused by natural disasters, flooding, fire, or other Force Majeure Events.
- Third-party damage to ductwork or system components (see Section 6 for third-party damage rules).

WARNING — DEVIATIONS VOID PERFORMANCE GUARANTEE: Even if ALL documentation is correct and complete, ANY deviation from the Plans that was not pre-approved in writing by Designer voids the Performance Guarantee for the affected areas. This includes deviations that may appear minor or cosmetic. No exceptions.

5.7 Remedy Process Overview

When a performance deficiency is verified, the remedy process follows these steps:

Step 1 — Written Claim

Client submits a written claim to Designer within 30 days of discovery, including: date of discovery, description of the issue, rooms or areas affected, and the specific Performance Guarantee standard believed to be unmet.

Step 2 — Investigation

Designer investigates within 10 Business Days, including review of Commissioning Data, review of Installer Certification, and onsite inspection if necessary. Designer determines whether the issue is a design deficiency covered by the guarantee or an installation/maintenance/equipment issue outside Designer's responsibility.

Step 3 — Corrective Action Plan

If Designer determines the issue is a covered design deficiency, Designer prepares a Corrective Action Plan within 15 Business Days, detailing the proposed remedy work, estimated costs (against the applicable Remedy Cap), and timeline.

Step 4 — Remedy Work Execution

Remedy work is scheduled and performed within 30 Business Days of Client approval. Work is performed by the original Installer or a qualified substitute approved by Designer.

Step 5 — Verification

After remedy work, Designer performs verification measurements per the Measurement Protocol to confirm the deficiency is corrected.

5.8 Warranty Period

The Warranty Period is **six (6) years** from the date of final Commissioning (or substantial completion if Commissioning is not performed). This corresponds to the Utah statute of limitations for construction defects under Utah Code Annotated. All performance claims must be submitted within the Warranty Period. The Warranty Period is not extended by Remedy Work. Upon expiration, Designer's obligations under the Performance Guarantee and Remedy Caps terminate automatically.

5.9 Claim Limits

- Maximum of **two (2) claims** per Project: one (1) pre-sheetrock and one (1) post-occupancy.
- Each claim must be submitted in writing within **30 days** of discovery.
- Designer has **10 Business Days** to investigate each claim.
- Remedy work for approved claims scheduled within **30 Business Days** of approval.
- Once the applicable Remedy Cap is exhausted, no further remedy work is required.

SECTION 6: INSTALLER REQUIREMENTS & OBLIGATIONS

This Section establishes the minimum requirements for the Installer engaged to physically install the HVAC System. The finest design cannot achieve its intended performance if the installation is deficient. These requirements are mandatory for all Service Tiers and essential for Performance Guarantee activation.

6.1 Licensing Requirements

- **Utah DOPL HVAC Contractor License:** Current, valid, in good standing with no pending disciplinary actions. License number must be recorded on the Installer Certification Checklist (Attachment A).
- **Business License:** Current for the jurisdiction in which the Project is located.
- **EPA Section 608 Certification:** All technicians handling refrigerants must hold appropriate EPA certification.
- **OSHA Compliance:** Experience Modification Rate (EMR) of 1.0 or below.
- **Journeyman Status:** Lead installers must be journeyman-level HVAC mechanics with minimum 5 years documented experience.

6.2 Insurance Requirements

The Installer must maintain the following minimum coverages throughout the Project and Warranty Period. Certificates of Insurance (COI) must be provided to Designer before installation begins.

- **General Liability:** $1,000,000 per occurrence / $2,000,000 aggregate, including products-completed operations.
- **Workers' Compensation:** As required by Utah law; employer's liability ≥ $500,000 each accident.
- **Commercial Auto:** $1,000,000 combined single limit for all owned, hired, and non-owned vehicles.
- **Umbrella/Excess:** $1,000,000 per occurrence and aggregate (recommended; required for Elite Tier).
- **Professional Liability (E&O):** $500,000 per claim / $1,000,000 aggregate if Installer provides any design services.

Installer's policies must name Polar Breeze LLC, the Client, and the General Contractor (if applicable) as additional insureds on a primary and non-contributory basis. Waiver of subrogation required in favor of all additional insureds.

6.3 Safety Standards

The Installer is responsible for maintaining safe working conditions and complying with all applicable safety regulations:

- OSHA general industry standards (29 CFR 1910) and construction standards (29 CFR 1926).
- Fall protection requirements for work at heights exceeding six (6) feet.
- Confined space entry procedures for work in attics, crawlspaces, and mechanical rooms.
- Electrical safety procedures, including lockout/tagout for equipment connections.
- Personal protective equipment (PPE) requirements for all workers on site.
- Fire prevention and hot work procedures for soldering, brazing, and torch operations.
- Hazardous materials handling for refrigerants, sealants, and insulation materials.
- First aid equipment and emergency procedures available on site at all times.

6.4 Photo Documentation Requirements

The Installer must provide date-stamped, labeled photos at key stages:

- Minimum 6 photos of trunk lines showing sizes, reductions (funnel points), and transitions.

- Plenum connection photos confirming no end connections.
- Return duct photos showing sizes, routes, and support.
- Equipment photos showing model plates, clearances, and connections.
- Sealing and insulation photos at critical connections.
- Register and grille photos in final locations.

6.5 Pre-Close Inspection Requirement

MANDATORY: The General Contractor (or Client, if no GC) must provide Polar Breeze LLC the opportunity to inspect all ductwork BEFORE drywall or ceilings are closed over the duct system.

If the GC (or Client) closes drywall or ceilings without providing Polar Breeze the opportunity to inspect, the GC (or Client) bears the full cost of:

- Reopening the drywall or ceiling to provide inspection access.
- Any corrections required to bring the installation into compliance with the Plans.
- Re-closing and finishing the drywall or ceiling after corrections are made.
- Re-commissioning any affected areas of the system.

This requirement exists because pre-sheetrock inspection is the most cost-effective correction point. Corrections made before drywall cost a fraction of post-drywall repairs.

6.6 Third-Party Damage Rules

When other trades (plumbers, electricians, framers, etc.) damage or alter Polar Breeze's designed ductwork or system components, the responsible trade bears the full cost of:

- **Diagnosis:** The cost of identifying what was damaged, moved, or altered.
- **Repair:** The cost of restoring the ductwork or system to its designed condition.
- **Re-Commissioning:** The cost of re-testing and re-verifying performance in the affected areas.

Guarantee Suspension: The Performance Guarantee is **SUSPENDED** for any areas affected by third-party damage until the damage is fully repaired and the system is re-commissioned to Designer's satisfaction. The guarantee resumes only after successful re-commissioning.

CRITICAL — DEVIATIONS VOID PERFORMANCE GUARANTEE: Even if all documentation is correct and complete, ANY deviation from the stamped Plans that was not pre-approved in writing by Designer voids the Performance Guarantee for the affected areas. This applies regardless of the reason for the deviation, including site conditions, material availability, or Installer preference. No exceptions.

6.7 Adherence to Airflow Excellence Principles

Strict compliance with the Airflow Excellence Principles is mandatory. The following specific requirements apply:

- **No Plenum-End Connections:** No ducts to plenum ends regardless of space constraints. Contact Designer for alternatives.
- **Funnel Trunk Installation:** Size reductions at locations shown in Plans. Constant-size trunk runs prohibited.
- **Branch Run Routing:** Route along paths shown in Plans, maintaining specified sizes and minimizing turns.
- **Flex Duct Discipline:** ≤10% compression, support every 4 feet, inner liner tight, no kinks or sagging.
- **Turning Vanes:** SMACNA-compliant turning vanes in all elbows per Plans.

- **Sealing:** UL 181-rated mastic or metal tape at all joints. Flex connections use the four-step method. Cloth duct tape prohibited.

6.8 Reporting Obligations

- Notify Designer immediately of any site condition conflicting with Plans.
- Notify Designer of any Deviation and obtain written approval before proceeding.
- Submit completed Installer Certification Checklist (Attachment A) before requesting guarantee activation.
- Submit all Commissioning Data (Attachment B) within 5 Business Days of system start-up.
- Notify Designer of AHJ inspection dates at least 5 Business Days in advance.
- Provide warranty registration confirmations within 30 days of installation.

6.9 Training Requirements

- **Pre-Installation Training (Premium/Elite):** Lead mechanic(s) must attend a pre-installation meeting conducted by Designer to review Plans, discuss Airflow Excellence Principles, and establish expectations. This meeting may be conducted in person, by phone, or via video at Designer's discretion.
- **ACCA Familiarity:** Installer must understand ACCA Manual D duct design principles and Manual J methodology to execute the installation correctly.
- **Manufacturer Training:** For equipment requiring specialized procedures (variable-speed, communicating systems, zoning), Installer must have completed manufacturer's installation training or be factory-authorized.
- **Commissioning Competence:** Personnel performing CFM, static pressure, and temperature measurements must be trained in proper instrument use and the Measurement Protocol (Section 5.5).

SECTION 7: QUALITY CONTROL & TESTING

This Section establishes quality control procedures and testing requirements. Quality control is a shared responsibility among Designer, Installer, Client, and third-party agencies.

7.1 Pre-Sheetrock Testing

Pre-sheetrock testing is the most critical quality control checkpoint — the last opportunity to inspect and correct the entire duct system before it is concealed by drywall.

7.1.1 Visual Inspection

Performed by Designer (Elite) or Installer with documentation submitted to Designer (Premium/Standard):

- Verification of all trunk duct sizes at each reduction point against Plans.
- Verification of all branch duct connections, sizes, and routing.
- Verification that no ducts connect to plenum ends.
- Flex duct compliance: ≤10% compression, proper support, no kinks.
- All fittings, transitions, and turning vanes installed per specifications.
- Sealing at all joints — mastic coverage without gaps.
- Insulation type and R-value on all ducts, especially in unconditioned spaces.
- Equipment installation: correct model, orientation, clearances, and mounting.

7.1.2 Pre-Sheetrock Airflow Testing (Elite)

For Elite projects, Designer performs preliminary airflow testing including CFM measurements at accessible registers, static pressure at equipment, and identification of any branch runs with reduced airflow indicating obstructions.

7.1.3 Deficiency Resolution

Any deficiencies identified during pre-sheetrock testing must be corrected before drywall proceeds. This is the most cost-effective correction point — costs are a fraction of post-drywall repairs.

7.2 Post-Installation Airflow Balancing

After installation is complete and the building envelope is substantially closed, the system must be balanced to achieve design airflow at each register. Balancing adjusts fan speed, damper positions, and register settings to match design CFM.

- **Fan Speed:** Set to design speed or static pressure setpoint.
- **Total System CFM:** Verified against design total (±10% tolerance).
- **Register-by-Register:** Each register adjusted to within ±10% of design CFM, working farthest to closest.
- **Return Air:** Return CFM verified at each grille; total return ≈ total supply.
- **Final Measurements:** Recorded on Commissioning Data form (Attachment B).

7.3 Duct Leakage Testing

Duct leakage testing measures air escaping through gaps and poorly sealed joints. Testing is performed per RESNET/ANSI/ACCA 310 at 25 Pascals using a calibrated duct blaster.

7.3.1 Utah 2024 Code Requirements

As of July 1, 2024, Utah's residential energy code requires duct leakage testing when the furnace/air handler or any portion of the duct system is located outside the thermal envelope. The code also requires indoor heating, cooling, and ventilation equipment (including ductwork) to be inside the building thermal envelope. Many existing homes pre-date or do not meet this standard.

7.3.2 Testing by Tier

Duct leakage testing is NOT included in the base price of any Service Tier. It is always an add-on at additional cost. Testing must be performed by certified professionals: HERS rater, blower door tester, or state-certified third party.

- **Standard:** Add-on — required when code applies; available for any project.
- **Premium:** Add-on — recommended; results documented in Commissioning Data.
- **Elite:** Add-on — **required**; results documented in full commissioning packet.

7.4 ADPI Verification (Add-On Service)

ADPI verification is available as an **add-on service at additional cost** for any Service Tier. It is NOT included in the base price of any tier, including Elite. When engaged, Air Diffusion Performance Index (ADPI) is measured in every conditioned room where applicable. The target is ADPI ≥80%. Where standard ADPI tables do not apply (unusual room geometries, high ceilings, atypical register placements), jet mapping (available at $200/hour) provides verification of adequate air mixing.

7.5 Temperature Rise/Drop Verification

Temperature rise (heating) and drop (cooling) across equipment verify proper operation. Heating: measured rise must fall within manufacturer's range (typical 35-65°F for gas furnaces). Cooling: measured drop typically 14-22°F at full load. Values outside expected ranges indicate airflow or charge issues.

7.6 Documentation Requirements

- **Pre-Sheetrock Inspection Report:** Written report with deficiencies, corrective actions, and verification.
- **Commissioning Data Form (Attachment B):** All CFM, static pressure, temperature, and equipment data.
- **Photo Documentation:** Complete set per Section 6.4, organized and labeled.
- **Installer Certification Checklist (Attachment A):** Completed and signed.
- **Duct Leakage Test Report:** If testing was performed, with CFM25 per 100 sq ft results.
- **ADPI Measurements (Elite):** Room-by-room ADPI results and jet mapping documentation.
- **Equipment Start-Up Report:** Operating parameters, refrigerant charge, safety controls.
- **Calibration Records:** Available upon request for all instruments used.

7.7 Third-Party Verification

Third-party verification provides independent confirmation of system performance. Required for Elite projects when disputes cannot be resolved between Designer and Installer. Testers must be certified HERS Raters (RESNET), certified TAB technicians (AABC or NEBB), or equivalent qualified professionals.

Cost Allocation: If requested by Designer, Designer pays. If requested by Client, Client pays. In dispute resolution, costs split equally. If results support the claim, the responsible party reimburses.

7.8 Instrument Calibration Requirements

All instruments used for performance measurements must be properly calibrated:

- Digital thermometers: Calibrated within 12 months, ±0.5°F accuracy, NIST-traceable.
- Flow hoods: Calibrated within 12 months per manufacturer specifications, NIST-traceable.
- Manometers: Calibrated within 12 months, ±0.01 in. wg accuracy, NIST-traceable.
- Duct blasters: Calibrated within 12 months per manufacturer specifications.
- Anemometers: Calibrated within 12 months per manufacturer specifications.
- Calibration certificates must be available upon request and may be required as part of Commissioning Data.
- Instruments outside calibration period shall not be used for official performance measurements.

7.9 Quality Control Checklist Summary

The following table summarizes quality control requirements by Service Tier:

Quality Control Item	Standard	Premium	Elite
Pre-Sheetrock Visual Inspection	Installer self-certifies	Installer documents + Designer review	Designer conducts onsite
Pre-Sheetrock Airflow Testing	Not included	Optional add-on	Included
Post-Installation Balancing	Installer performs	Installer performs, Designer reviews data	Installer performs, Designer verifies
CFM Verification	Installer records	Installer records, Designer reviews	Designer or 3rd party verifies
Static Pressure Test	Installer records	Installer records, Designer reviews	Designer or 3rd party verifies
Temperature Delta Test	Not required	Installer records per protocol	Designer conducts or verifies
Duct Leakage Test	Add-on (req. if code applies)	Add-on (recommended)	Add-on (required)
ADPI Measurement	Add-on	Add-on	Add-on
Equipment Start-Up Verification	Installer certifies	Installer certifies	Designer witnesses or reviews
Photo Documentation	Installer provides	Installer provides	Designer reviews completeness
Commissioning Report	Add-on	CFM, static, delta-T	Full report by Designer
Third-Party Verification	Not included	Available upon request	Required for disputes

7.10 Deficiency Categories

Deficiencies identified during quality control are categorized by severity and responsibility:

7.10.1 Critical Deficiencies

Critical deficiencies must be corrected before work can proceed. These include: duct connections to plenum ends, missing trunk size reductions, equipment installed with wrong model or tonnage, and safety code violations. Critical deficiencies indicate systemic non-compliance and require immediate corrective action.

7.10.2 Major Deficiencies

Major deficiencies must be corrected before Commissioning. These include: flex duct compression exceeding 10%, missing turning vanes, undersized branch ducts, unsealed joints, and missing insulation in unconditioned spaces.

7.10.3 Minor Deficiencies

Minor deficiencies should be corrected but do not prevent Commissioning. These include: cosmetic issues, minor support spacing variations, labeling omissions, and documentation incompleteness.

7.10.4 Responsibility Allocation

Design deficiencies (errors in Plans) are Designer's responsibility under the Remedy Cap. **Installation deficiencies** (failure to follow Plans) are the Installer's responsibility. **Equipment deficiencies** (manufacturing defects) are the Manufacturer's responsibility under warranty. **Information deficiencies** (inaccurate Client-provided data) are the Client's responsibility.

SECTION 8: REMEDY & CLAIMS PROCEDURES

This Section establishes detailed procedures for submitting, investigating, and resolving performance claims. All claims must follow these procedures; failure to comply may result in denial.

8.1 Notice Requirements

8.1.1 Written Notice

All performance claims must be submitted in writing and include: (a) date the issue was first observed; (b) detailed description including affected rooms; (c) specific Performance Guarantee standard believed unmet; (d) any supporting evidence (photos, temperature logs); (e) the Installer's name and contact information.

8.1.2 Timing Requirements

Claims must be submitted within **30 days of discovery**. Discovery is defined as the date the Client first knew or reasonably should have known of the performance issue. Late claims may be denied regardless of merit. Claims must be submitted within the six-year Warranty Period.

8.1.3 Delivery Methods

Claims may be delivered by certified mail, overnight courier, or email with delivery confirmation. Phone calls, text messages, and social media contacts do not constitute valid claim notice.

8.2 Investigation Process

Designer investigates each claim within **10 Business Days** of receipt. Investigation includes:

- Review of Commissioning Data (Attachment B) for relevant measurements.
- Review of Installer Certification Checklist (Attachment A) for compliance verification.
- Review of any approved Change Orders or documented Deviations.
- Onsite inspection and independent measurements if Designer determines it necessary.
- Consultation with the Installer regarding installation conditions and any known issues.
- Determination of root cause: design deficiency, installation error, maintenance issue, equipment malfunction, or other.

8.2.1 Determination

After investigation, Designer provides a written determination: (a) **Claim Approved** — the issue is a design deficiency covered by the Performance Guarantee, and a Corrective Action Plan will be prepared; (b) **Claim Denied** — the issue is not a design deficiency (installation error, maintenance issue, equipment malfunction, or excluded condition); (c) **Claim Partially Approved** — some aspects are covered while others are excluded.

8.3 Dispute Resolution

If Client disputes Designer's determination, the following escalation process applies:

8.3.1 Step 1 — Direct Negotiation

Senior representatives of both parties meet (in person or video conference) within 15 Business Days to discuss the dispute and attempt resolution in good faith.

8.3.2 Step 2 — Mediation

If negotiation fails within 30 calendar days, either party may request mediation by a mutually agreed mediator in Utah County, Utah. Mediation costs are split equally. Mediation must occur within 60 days of the request.

8.3.3 Step 3 — Binding Arbitration

If mediation fails, the dispute is resolved by binding arbitration under the American Arbitration Association (AAA) Construction Industry Rules, conducted in Utah County, Utah. The arbitrator's decision is final and binding, subject to limited judicial review under the Federal Arbitration Act and Utah Arbitration Act.

8.3.4 Third-Party Testing

Either party may commission third-party testing at any stage. In arbitration, third-party results take priority over Installer self-reported measurements. The arbitrator determines cost allocation.

8.4 Remedy Cost Allocation

REMEDY CAPS APPLY ONLY TO VERIFIED DESIGN ERRORS BY POLAR BREEZE LLC. Installation errors, material defects, equipment failures, Client modifications, and third-party damage are NOT covered by Remedy Caps and are NOT Designer's financial responsibility under any circumstances.

Remedy costs are allocated as follows: **Design errors by Polar Breeze only** are charged against the applicable Remedy Cap. **Installation errors** are the Installer's responsibility at no cost to the Remedy Cap. **Equipment defects** are addressed under manufacturer warranties. **Maintenance failures** are the Client's responsibility. **Client modifications** are the Client's responsibility. **Third-party damage** is the responsible trade's liability.

Once the applicable Remedy Cap is exhausted, Designer has no further financial obligation regardless of whether additional deficiencies exist. The Remedy Cap is the maximum aggregate liability for verified design errors only, not a per-incident limit and not a general warranty fund.

8.5 Covered Remedy Work

The following types of work are covered by the Remedy Cap when they result from a verified design deficiency:

8.5.1 Pre-Sheetrock Remedies (Before Drywall)

- Duct rerouting to correct design-related airflow distribution problems.
- Duct resizing where original design specified incorrect dimensions.
- Addition of supply registers or return grilles where original design provided insufficient coverage.
- Equipment upgrades if original equipment specification was undersized for the calculated loads.
- Transition fitting replacements to correct design-specified fitting selections.
- Design revision costs including re-calculation and re-stamping fees.
- Labor and materials for all pre-sheetrock corrective work.

8.5.2 Post-Occupancy Remedies (After Drywall)

- Temperature balancing corrections for rooms that do not meet Performance Guarantee delta requirements.
- Airflow corrections for rooms receiving insufficient or excessive CFM.
- Drywall removal, repair, and refinishing where duct access is required for corrections.
- Additional damper installation for zone balancing.
- Register or grille replacement where original specification was incorrect.
- Duct modifications accessible through attic, crawlspace, or mechanical room without drywall removal.
- Labor and materials for all post-occupancy corrective work.

8.6 Non-Covered Items

The following are NOT covered by the Remedy Cap and are NOT Designer's responsibility:

- Installation defects — duct system installed differently from Plans (Installer's liability).
- Equipment malfunctions or manufacturing defects (Manufacturer warranty responsibility).
- Refrigerant issues including incorrect charge, leaks, or wrong refrigerant type (Installer's responsibility).
- Electrical wiring errors (Electrician's responsibility).
- Thermostat programming or zone control configuration errors (Installer's responsibility).
- Building envelope changes made after design completion without Designer notification.
- Damage from water, fire, pests, or other external events.
- Performance issues in rooms or areas not included in the original design scope.
- Normal wear and tear on equipment and ductwork.
- Cosmetic issues that do not affect system performance.
- Third-party damage to ductwork (see Section 6.6 — responsible trade bears all costs).

8.7 Remedy Process Timeline Summary

Step	Action	Timeline
1	Client discovers issue and submits written claim	Within 30 days of discovery
2	Designer acknowledges receipt of claim	Within 3 Business Days
3	Designer completes investigation	Within 10 Business Days of claim receipt
4	Designer issues written determination	Upon completion of investigation
5	Designer prepares Corrective Action Plan (if approved)	Within 15 Business Days
6	Client reviews and approves Corrective Action Plan	Within 10 Business Days
7	Remedy work scheduled and performed	Within 30 Business Days of approval
8	Verification measurements taken	Within 5 Business Days of completion
9	Written verification report provided to Client	Within 5 Business Days

SECTION 9: INSURANCE, INDEMNITY & LIABILITY

9.1 Designer Insurance

Polar Breeze LLC maintains the following insurance coverages:

- **Professional Liability (E&O):** Minimum $1,000,000 per claim / $2,000,000 aggregate, covering design errors and omissions.
- **General Liability:** Minimum $1,000,000 per occurrence / $2,000,000 aggregate.
- **Workers' Compensation:** As required by Utah law.

9.2 Installer Insurance

Installer insurance requirements are established in Section 6.2. Certificates of Insurance must be provided to Designer before installation begins and must be maintained throughout the Warranty Period.

9.3 Client Insurance

Client is responsible for maintaining adequate homeowner's or builder's risk insurance covering the Project, including coverage for HVAC equipment and ductwork during and after construction.

9.4 Indemnification

9.4.1 Designer Indemnification

Designer shall indemnify, defend, and hold harmless Client from claims, damages, and expenses arising from Designer's negligent acts, errors, or omissions in performing design services under this Agreement, subject to the limitation of liability provisions in Section 9.6.

9.4.2 Client Indemnification

Client shall indemnify, defend, and hold harmless Designer from claims, damages, and expenses arising from: (a) Client's breach of this Agreement; (b) inaccurate or incomplete information provided by Client; (c) Installer's negligence or willful misconduct; (d) Client's failure to maintain the HVAC system; (e) unauthorized modifications to the HVAC system or Plans.

9.4.3 Installer Indemnification

The Installer shall indemnify, defend, and hold harmless both Designer and Client from claims arising from: (a) Installer's negligent installation or deviation from Plans; (b) Installer's failure to comply with applicable codes and safety standards; (c) bodily injury or property damage caused by Installer's work or employees.

9.5 Comparative Fault

Where a performance deficiency results from the combined actions or omissions of multiple parties, liability is allocated based on each party's proportionate share of fault, consistent with Utah's comparative fault principles.

9.6 Limitation of Liability

IMPORTANT — PLEASE READ CAREFULLY: The following limitations of liability are a fundamental part of this Agreement and a material inducement for Designer to enter into this Agreement at the pricing specified.

9.6.1 Maximum Liability Cap

Designer's total aggregate liability for all claims under this Agreement shall not exceed the applicable Remedy Cap: $10,000 (Standard), $50,000 (Premium), or $100,000 (Elite). This cap applies to all claims combined, whether based on contract, tort, negligence, strict liability, or any other legal theory.

9.6.2 Consequential Damages Exclusion

NEITHER PARTY SHALL BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES, including but not limited to: lost profits, lost rent, loss of use, utility costs, temporary housing, emotional distress, diminished property value, or any other indirect damages, regardless of whether such damages were foreseeable or whether the party was advised of the possibility of such damages.

9.6.3 Design Professional Standard of Care

Designer's services are performed in accordance with the standard of care ordinarily exercised by competent HVAC design professionals in Utah under similar circumstances. Designer does not guarantee a perfect result and does not warrant that the design will be free from all errors or that the HVAC system will perform perfectly under all conditions.

9.7 Insurance Claims Process

In the event of a claim covered by any insurance policy maintained under this Agreement, the following process applies:

- The Party discovering the event gives written notice to the other Party and to its insurance carrier within the timeframes required by the applicable insurance policy.
- The Parties cooperate in the investigation and adjustment of any insurance claim, including providing access to the Project site, documents, and personnel as reasonably requested.
- No Party shall take any action that would void, prejudice, or impair the other Party's insurance coverage.
- Insurance proceeds received for covered losses shall be applied first to repair or correct the condition giving rise to the claim.
- The pursuit of an insurance claim does not relieve any Party of its obligations under this Agreement.

9.8 Subrogation Rights

To the extent permitted by their respective insurance policies, the Parties waive all rights of subrogation against each other and against the Installer and General Contractor for losses covered by insurance. This waiver applies to property damage, business interruption, and any other losses insured under the Parties' respective policies.

SECTION 10: CONFIDENTIALITY & INTELLECTUAL PROPERTY

10.1 Confidential Information

"Confidential Information" means all non-public information disclosed by either Party in connection with this Agreement, including: design methodologies, pricing, business practices, client lists, the Airflow Excellence Principles, the Plans, Commissioning Data, financial information, and any information marked "confidential" or that a reasonable person would understand to be confidential.

Confidential Information does NOT include: (a) information that is or becomes publicly available through no fault of the receiving party; (b) information already known to the receiving party; (c) information received from a third party without restriction; (d) information independently developed without use of the disclosing party's information.

10.2 Intellectual Property Ownership

10.2.1 Designer Ownership

All Plans, designs, calculations, methodologies, and proprietary information created by Designer are and remain the exclusive Intellectual Property of Polar Breeze LLC. This includes the Airflow Excellence Principles, design templates, calculation methods, and all derivative works.

10.2.2 Client License

Upon full payment, Client receives a non-exclusive, non-transferable, revocable license to use the Plans for the specific Project identified in this Agreement. This license does not include the right to: modify the Plans, use the Plans for any other project, distribute the Plans to third parties, or reverse-engineer Designer's methodologies.

10.3 Confidentiality Obligations

Each Party shall: (a) protect the other Party's Confidential Information with at least the same degree of care it uses to protect its own confidential information (but not less than reasonable care); (b) not disclose Confidential Information to any third party without prior written consent; (c) use Confidential Information only for purposes of this Agreement.

Permitted disclosures: (a) to employees and agents who need to know and are bound by confidentiality; (b) to the AHJ as required for permit applications; (c) as required by law or court order (with prompt notice to the disclosing party).

10.4 Duration of Confidentiality

Confidentiality obligations survive for five (5) years after termination of this Agreement, except that trade secrets (including the Airflow Excellence Principles) are protected for as long as they remain trade secrets.

10.5 Non-Solicitation

The Installer shall not directly solicit the Client for HVAC design services that compete with Polar Breeze LLC's services for a period of two (2) years after completion of the Project. This provision does not prevent the Installer from accepting unsolicited requests from the Client for future work.

10.6 Return of Materials

Upon termination or expiration of this Agreement, each Party shall return or destroy all Confidential Information in its possession belonging to the other Party within thirty (30) days. Designer may retain copies of all design files for archival and quality assurance purposes.

10.7 Remedies for Breach of Confidentiality

The Parties acknowledge that a breach of confidentiality may cause irreparable harm that cannot be adequately compensated by monetary damages. In addition to any other remedies available at law or equity, the non-breaching Party shall be entitled to seek injunctive relief to prevent or restrain any actual or threatened breach of this Section, without the requirement of posting a bond or other security.

SECTION 11: FORCE MAJEURE

11.1 Definition

A "Force Majeure Event" is any event beyond a party's reasonable control that prevents or delays performance, including: natural disasters (earthquakes, floods, fires, hurricanes), pandemics or epidemics, government orders or restrictions, wars, terrorism, riots, civil unrest, strikes, embargoes, utility failures, extreme weather events, and supply chain disruptions of national scope.

Force Majeure does NOT include: financial difficulties, economic downturns, inability to obtain financing, changes in market conditions, or events that a party could have prevented through reasonable diligence.

11.2 Notice and Mitigation

A Party claiming Force Majeure must provide written notice within five (5) Business Days of the event, including the nature and expected duration. The affected Party must use commercially reasonable efforts to mitigate the impact and resume performance as soon as practicable.

11.3 Effect on Performance

Performance obligations are suspended during the Force Majeure Event. Scheduling windows and response times are extended by the duration of the delay. If the delay exceeds ninety (90) calendar days, either Party may terminate the Agreement upon thirty (30) days' written notice.

11.4 Financial Obligations

Force Majeure does not excuse financial obligations already accrued. Payment obligations for services already performed remain due and payable. Deposits and partial payments are subject to the termination refund provisions of Section 12.

SECTION 12: TERMINATION

This Section establishes termination rights, procedures, and consequences.

12.1 Termination for Cause by Designer

- **Non-Payment:** Client fails to pay within 30 days and fails to cure within 10 Business Days of written notice.
- **Misrepresentation:** Client provides materially false or misleading information affecting the design.
- **Installer Refusal:** Installer refuses to follow Plans or cooperate with quality control procedures.
- **Unsafe Conditions:** Client/GC fails to correct unsafe site conditions within 5 Business Days of notice.
- **Material Breach:** Client commits a material breach not cured within the applicable Cure Period.

12.2 Termination for Cause by Client

- **Non-Performance:** Designer fails to deliver Core Deliverables within scheduling window plus 10 Business Day grace period.
- **Material Design Error:** Plans contain material errors not corrected within the Cure Period.
- **License Suspension:** Designer's DOPL license is suspended or revoked and not reinstated within 30 days.
- **Insurance Lapse:** Designer's E&O or GL insurance lapses and is not reinstated within 30 days.

12.3 Termination for Convenience

Either Party may terminate for convenience with 30 days' written notice.

12.3.1 By Client

- Before Plans delivered: 50% refund of fees paid, minus Designer's actual costs incurred.
- After Plans delivered: No refund (Plans considered fully-performed services).
- Client receives all Deliverables completed as of termination date.
- Performance Guarantee terminates immediately.

12.3.2 By Designer

- Full refund of fees paid for services not yet rendered.
- All Deliverables completed to date delivered to Client.
- Reasonable transition assistance provided.
- Performance Guarantee terminates immediately.

12.4 Post-Termination Obligations

Upon termination: (a) each Party returns or destroys the other's Confidential Information per Section 10.6; (b) Designer issues a final invoice within 15 Business Days; (c) Client pays amounts due within 30 days; (d) if amounts remain outstanding, Client's license to use Plans is suspended; (e) the Performance Guarantee terminates immediately regardless of termination reason.

12.5 Survival

The following provisions survive termination: Section 1 (Definitions), Section 8 (Remedy & Claims, for pre-termination claims), Section 9 (Insurance, Indemnity & Liability), Section 10 (Confidentiality & IP), Section 11 (Force Majeure),

Section 12.4-12.5, and Section 13 (General Provisions).

SECTION 13: GENERAL PROVISIONS

13.1 Entire Agreement

This Agreement, together with all attachments, constitutes the entire agreement between the parties and supersedes all prior agreements, understandings, negotiations, and discussions, whether oral or written. This includes all prior emails, text messages, phone conversations, proposals, quotes, estimates, and marketing materials.

13.2 Contract Modification

This Agreement may be modified, changed, or updated by Polar Breeze LLC at any time. Client will be notified via email of any changes to the Agreement terms, conditions, pricing, or procedures.

Continued use of services after notification constitutes acceptance of the modified terms. No grandfather clauses — all updates apply to active contracts upon notification. If Client does not agree with the modifications, Client may terminate the Agreement per Section 12.

13.3 Severability

If any provision is held invalid or unenforceable, such invalidity shall not affect other provisions. The parties agree to negotiate a substitute provision achieving the original intent to the greatest extent legally permissible.

13.4 Waiver

Failure to enforce any provision does not constitute a waiver. No waiver of any breach is a waiver of subsequent breaches. Waivers must be in writing.

13.5 Assignment

Neither Party may assign rights or obligations without prior written consent, except: (a) Designer may assign to a successor entity in a merger or asset sale; (b) Designer may delegate to qualified subcontractors while remaining responsible for delegated work.

13.6 Notices

All formal notices shall be delivered per the Notice definition in Section 1, addressed to the parties at the cover page addresses or such other address as designated by written notice.

13.7 Governing Law and Venue

This Agreement is governed by the laws of the State of Utah without regard to conflict of laws principles. Legal actions shall be brought exclusively in the Fourth Judicial District Court for Utah County, Utah, or the U.S. District Court for the District of Utah, Central Division.

JURY TRIAL WAIVER: BOTH PARTIES KNOWINGLY, VOLUNTARILY, AND INTENTIONALLY WAIVE THE RIGHT TO A TRIAL BY JURY IN ANY ACTION ARISING OUT OF OR RELATED TO THIS AGREEMENT. THIS WAIVER IS A MATERIAL INDUCEMENT FOR BOTH PARTIES.

13.8 Attorney Fees

In any legal action or arbitration, the prevailing party is entitled to recover reasonable attorney fees, costs, and expenses (including expert witness fees and arbitration fees) from the non-prevailing party.

13.9 Counterparts

This Agreement may be executed in counterparts, each deemed an original. Electronic signatures (DocuSign, Adobe Sign, or scanned signatures by email) are valid and binding.

13.10 No Third-Party Beneficiaries

This Agreement is for the sole benefit of the parties and their permitted successors and assigns. No third party (including the Installer, GC, or Manufacturer) has any rights under this Agreement unless bound by a separate agreement with Designer.

13.11 Rules of Construction

(a) "including" means "including but not limited to"; (b) singular includes plural and vice versa; (c) "days" means calendar days unless "Business Days" is specified; (d) dollar amounts are USD; (e) this Agreement shall not be construed more strictly against either Party.

13.12 Maintenance Plan — Guarantee Link

An active maintenance plan keeps the Performance Guarantee active. Dropping maintenance narrows guarantee coverage. Maintenance includes airflow re-verification (CFM at registers) — not just filter swaps. This is a substantive maintenance requirement, not a generic "change your filters" obligation.

- **Active Maintenance Plan:** Full Performance Guarantee coverage remains in effect.
- **No Active Maintenance:** Performance Guarantee coverage may be reduced or voided at Designer's discretion.
- **Maintenance Re-verification:** Periodic airflow measurement at registers confirms nothing has shifted, collapsed, or been blocked.

13.13 Equipment Warranty Registration

Polar Breeze LLC registers equipment with manufacturers for maximum warranty coverage as part of this Agreement. This is a service included with the Agreement, not a guarantee of warranty terms. Actual warranty coverage, duration, and terms are determined solely by the equipment manufacturer.

13.14 Rebate & Tax Credit Support

Polar Breeze LLC provides documentation to support federal tax credits and utility rebates. Designer does NOT guarantee approval — Designer provides the paperwork and supporting documentation. Approval is at the sole discretion of the applicable government agency or utility.

Applicable programs include (subject to availability and current program rules):

- **Federal IRA Tax Credits:** Heat pumps up to $2,000/year; central AC up to $600/year.
- **Rocky Mountain Power Wattsmart:** Heat pumps up to $2,000; ductless systems up to $1,700; smart thermostats up to $100.
- **Enbridge Gas ThermWise:** High-efficiency furnace rebates (amounts vary).

Customers may combine federal tax credits with local utility rebates. Designer provides documentation to support all eligible claims but is not responsible for program changes, eligibility determinations, or approval decisions.

13.15 Attorney Review Notice

NOTICE: The legal provisions in Sections 9 through 13 are provided as a framework. Polar Breeze LLC recommends that all parties have this Agreement reviewed by qualified legal counsel before execution.

13.16 Home Value & Appraisal Documentation

A properly designed HVAC system supports home appraisal value. The documentation package provided by Polar Breeze — Manual J/D/T reports, commissioning data, ADPI measurements (Elite), and duct leakage test results — provides verifiable proof for appraisers and home inspectors that the HVAC system was professionally designed and commissioned to industry standards.

This is informational, not a guarantee of increased home value. Actual appraisal impact depends on market conditions, the appraiser's methodology, and other factors outside Designer's control.

SECTION 14: CLIENT ACKNOWLEDGMENTS

By executing this Agreement, Client acknowledges and agrees to each of the following statements. These confirm that Client has read, understood, and accepted all terms and conditions.

14.1 Agreement Review

I have read and understood all sections and attachments of this Agreement. I have had the opportunity to consult with legal counsel regarding the terms and conditions.

Client Initials: _____ **Date:** _____

14.2 Performance Guarantee Understanding

I understand that the Performance Guarantee activates ONLY when ALL seven (7) conditions in Section 5.1 are met. I understand the Standard Tier does not include Performance Guarantee activation.

Client Initials: _____ **Date:** _____

14.3 Equipment Requirements

I understand that each Service Tier requires a specific equipment type: Standard requires single-stage, Premium requires two-stage, and Elite requires modulating (variable-speed) or zoned equipment. I understand the performance guarantees are achievable only with the specified equipment type.

Client Initials: _____ **Date:** _____

14.4 Remedy Cap Understanding

I understand the Remedy Caps represent Designer's maximum liability: $10,000 (Standard), $50,000 (Premium), $100,000 (Elite). I accept these limitations as a fundamental term of this Agreement.

Client Initials: _____ **Date:** _____

14.5 Installer Deviation Consequences

I understand that ANY deviation from the Plans without Designer's written approval voids the Performance Guarantee. I accept responsibility for ensuring the Installer builds exactly to the Plans.

Client Initials: _____ **Date:** _____

14.6 Service Tier Selection

I have selected the Service Tier indicated on the cover page after considering all features, limitations, and pricing. Tier downgrades after deposit are not permitted.

Client Initials: _____ **Date:** _____

14.7 Information Accuracy

I will provide accurate, complete, and timely information for the design. Inaccurate information may adversely affect the design and may void the Performance Guarantee.

Client Initials: _____ **Date:** _____

14.8 Installer Compliance

I will ensure the Installer reviews the stamped Plans before installation, completes the Installer Certification Checklist (Attachment A), provides all Commissioning Data (Attachment B), and notifies Designer of proposed field changes.

Client Initials: _____ **Date:** _____

14.9 Pre-Close Inspection

I understand that GC (or I, if no GC) must provide Polar Breeze the opportunity to inspect ductwork BEFORE drywall closes. If drywall is closed without inspection, GC/I bear the cost of reopening, correcting, and re-closing.

Client Initials: _____ **Date:** _____

14.10 Maintenance Obligations

I understand that an active maintenance plan keeps the Performance Guarantee active. Maintenance includes airflow re-verification at registers, not just filter changes. Dropping maintenance may narrow or void guarantee coverage.

Client Initials: _____ **Date:** _____

14.11 Elite Tier Diagnostics vs. Materials

If I selected Elite Tier: I understand that unlimited diagnostics and engineering consultation are included, but parts and major materials are still billable unless the issue is a verified Polar Breeze design error.

Client Initials: _____ **Date:** _____

14.12 Dispute Resolution

I agree to the dispute resolution procedures in Section 8.3 (negotiation, mediation, binding arbitration). I acknowledge the JURY TRIAL WAIVER.

Client Initials: _____ **Date:** _____

14.13 Limitations of Liability

I understand and accept the limitations in Section 9.6, including the exclusion of consequential damages. Designer is not liable for lost rent, utility costs, discomfort, emotional distress, or other indirect damages.

Client Initials: _____ **Date:** _____

14.14 Confidentiality

I agree to maintain confidentiality of Designer's information per Section 10. The Plans are Designer's intellectual property; I receive only a limited license for the specific Project.

Client Initials: _____ **Date:** _____

14.15 Authorization

I am authorized to enter into this Agreement and to bind myself (and any entity I represent) to its terms and conditions.

Client Initials: _____ **Date:** _____

SECTION 15: SIGNATURES & EXECUTION

IN WITNESS WHEREOF, the parties have executed this Comprehensive Service Agreement as of the Effective Date.

15.1 Installer Acknowledgment

By signing below, the Installer acknowledges reading and understanding the Installer Requirements (Section 6), Quality Control requirements (Section 7), and all applicable provisions. The Installer agrees to install the HVAC System in strict accordance with the Plans and to complete the Installer Certification Checklist (Attachment A).

INSTALLER:

Company Name: _____

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Utah DOPL License #: _____

Insurance Policy #: _____

Phone: _____

Email: _____

15.2 Polar Breeze LLC — Designer

By signing below, the authorized representative certifies authority to enter into this Agreement and that all representations herein are true and accurate.

DESIGNER — POLAR BREEZE LLC:

Signature: _____

Printed Name: _____

Title: Owner / Licensed HVAC Contractor: _____

Date: _____

Utah DOPL License #: _____

Notary for Designer:

State of Utah, County of _____

Subscribed and sworn before me this _____ day of _____, 20____

Notary Public Signature: _____

My Commission Expires: _____

[NOTARY SEAL]

15.3 Client / Owner

By signing below, the Client confirms reading, understanding, and agreeing to all terms, including all Client Acknowledgments in Section 14.

CLIENT:

Signature: _____

Printed Name: _____

Date: _____

Phone: _____

Email: _____

Mailing Address: _____

CO-CLIENT (if applicable):

Signature: _____

Printed Name: _____

Date: _____

Notary for Client:

State of Utah, County of _____

Subscribed and sworn before me this _____ day of _____, 20____

Notary Public Signature: _____

My Commission Expires: _____

[NOTARY SEAL]

15.4 Witness

WITNESS 1:

Signature: _____

Printed Name: _____

Date: _____

Phone: _____

WITNESS 2:

Signature: _____

Printed Name: _____

Date: _____

Phone: _____

END OF COMPREHENSIVE SERVICE AGREEMENT

This Agreement consists of the foregoing pages, including all Sections (1 through 15). Attachments A through C are provided as separate documents and are incorporated by reference.

Polar Breeze LLC — HVAC Design & Commissioning Services
Utah County, Utah — Optimizing Comfort · Elevating Happiness
Utah's Only Duct Performance Guarantee
Licensed · E&O Insured · 20+ Years Experience