

# INTRO TO DOME LIVING

A QUICK-START GUIDE TO  
INSULATED CONCRETE DOMES



## THE BENEFITS

ICDs outperform  
conventional  
homes

## THE COST OF BUILDING

What to expect  
from start to finish

## GETTING STARTED

Key steps toward  
planning your  
own dome

## Contents

Introduction .....	3
Myths vs. Realities .....	4
How Domes Are Built .....	4
A technical illustration showing the layers that make up an Insulated Concrete Dome.....	5
Design Possibilities .....	6
Sustainability & Energy Efficiency .....	7
Durability & Safety .....	8
Cost to Build a Dome .....	9
Entry-Level Domes .....	9
Mid-Range Domes.....	9
Luxury & Compound Domes .....	10
Why Domes Cost Less Over Time .....	10
Financing & Insurance: How to Make a Lender Say “Yes” .....	11
Why Banks Say Yes .....	11
Our Process: From Dream to Dome .....	13
Step 1: Initial Consultation .....	13
Step 2: The Lifestyle & Design Catalog.....	13
Step 3: The Ultimate Dome Starter Pack .....	13
The Feasibility Study .....	15
Ready To Take The Next Step?.....	15

# Introduction

## The Dome Living Quick Start Guide

First off, thank you for taking the time to learn more about dome homes. We know that when people first hear about them, the questions come fast: *How much do they cost? How are they built? Can they really be financed and insured? What's it actually like to live in one?*

This guide was created as a **quick start resource** — our way of answering the most common questions in a clear, no-frills way. Think of it as a straight-to-the-point overview: the myths, the realities, the design possibilities, the costs, the safety advantages, and even what the process looks like from start to finish. We've done our very best to anticipate the questions you might have and to pack the answers into these pages. Of course, dome living is a big topic, and every property and project is unique. But if you're just starting out, this guide is meant to give you the clarity and confidence to begin exploring what's possible.

And here's our promise: if you want to go deeper, we've built full resources — the [Dome Home Master Guide](#), the [Dome Financing Playbook](#), and our [Feasibility Study](#) — that walk you through every detail, from cost calculators to lender checklists to custom design plans.

So again, thank you for your interest. We hope this guide not only answers your questions, but also sparks your imagination about what dome living can mean for you.

---

## Myths vs. Realities

Dome homes often spark curiosity, and with curiosity comes myths. Many people imagine dark, cave-like spaces when they hear the word “dome,” but the reality couldn’t be more different. Modern dome designs are filled with natural light, thanks to skylights, wide windows, and open interiors that channel daylight across the space. Instead of feeling closed in, dome homes often feel larger and brighter than traditional houses.

Another common misconception is that domes can’t be customized or that you’re “stuck” with an unusual floorplan. In truth, domes are some of the most flexible structures you can build. Since the strength is in the shell, interior walls can be placed — or removed — however you like. You can design an open-concept retreat, a multi-level home with lofts, or even a connected series of domes with breezeways, tunnels, and decks. Far from limiting, the dome structure actually frees you to create the kind of living space that matches your lifestyle.

Finally, there’s the belief that domes are expensive novelties or hard to finance and insure. While upfront costs can be similar to a custom home, dome owners quickly see savings in energy efficiency, maintenance, and longevity. Banks and insurers once hesitated, but today many recognize domes as lower-risk, long-lasting investments. Far from being oddities, domes are becoming smart, future-ready homes.

---

## How Domes Are Built

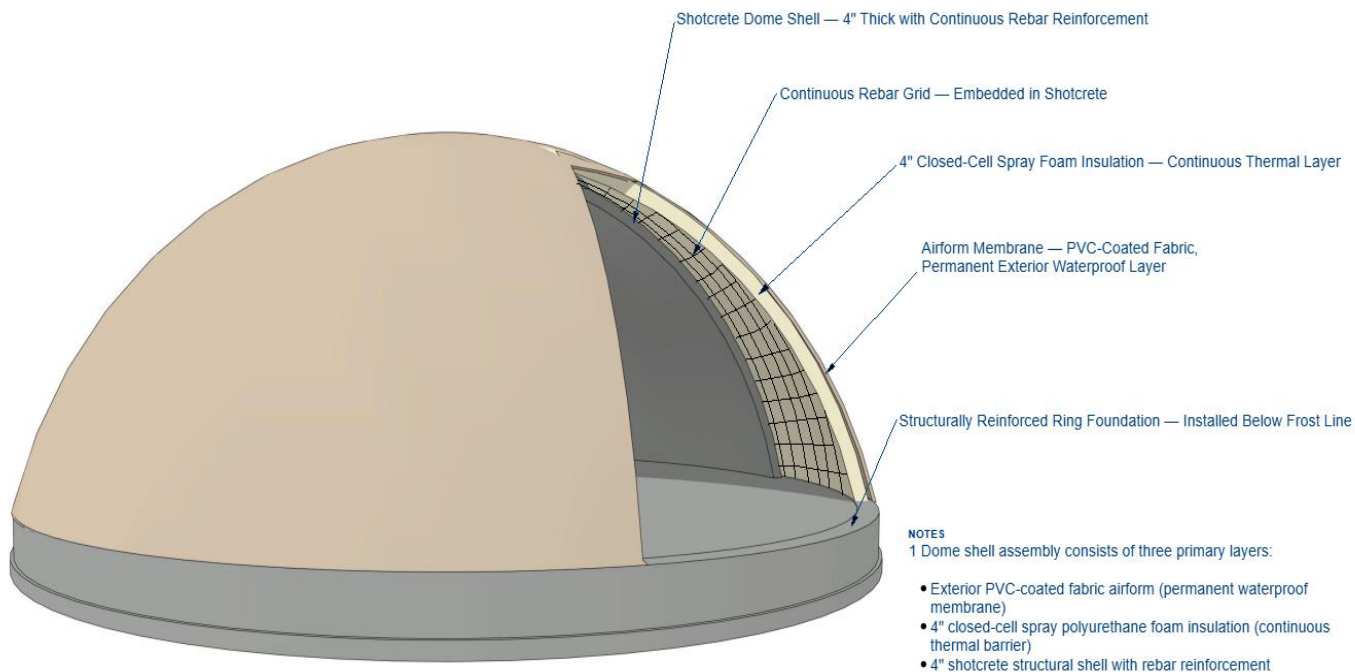
The process of building a dome may look futuristic, but it’s surprisingly straightforward. It begins with preparing a strong, reinforced concrete foundation — the anchor that will support the entire structure. From there, a massive fabric “airform” is inflated and secured to the foundation. Within hours, what was once an empty site now has the outline of a dome, capturing the imagination of anyone watching.

Inside the inflated form, crews spray layers of insulating foam, which not only provide thermal performance but also act as a base for reinforcement. Steel rebar is then embedded into the foam in a grid pattern, creating a skeleton of strength. The final step is spraying shotcrete — high-strength concrete — over the entire interior surface. Once it cures, the dome is no longer a balloon-shaped frame but a seamless, solid concrete shell.

This method creates homes with no joints, no weak points, and no vulnerable corners. The result is a monolithic structure that is airtight, durable, and highly efficient. It’s an elegant marriage of simplicity and strength: inflate, insulate, reinforce, and finish. From start to finish, dome construction proves that resilience doesn’t have to be complicated.



A technical illustration showing the layers that make up an Insulated Concrete Dome.



- NOTES
- 1 Dome shell assembly consists of three primary layers:
- Exterior PVC-coated fabric airform (permanent waterproof membrane)
  - 4" closed-cell spray polyurethane foam insulation (continuous thermal barrier)
  - 4" shotcrete structural shell with rebar reinforcement
- 2 Ring foundation is a continuous reinforced concrete footing, designed to carry all dome shell loads and installed below local frost line depth per code.
- 3 All reinforcing steel shall be placed per engineering drawings; minimum concrete cover to reinforcement: 2".
- 4 Closed-cell spray foam shall provide a minimum R-value of R-6.5 per inch (approx. R-28 for 4" thickness).
- 5 Airform membrane shall remain permanently in place as the exterior waterproofing system; no additional cladding required.
- 6 All dimensions shown are conceptual; final sizes, reinforcement spacing, and concrete strengths to be verified by structural engineer.

This illustration is intended to show wall layers and construction assembly only. It does not depict windows, doors, finishes, or architectural design features

Illustration is not to scale. Conceptual representation only. All structural details, reinforcement schedules, and material specifications to be verified by licensed structural engineer and per local building codes.

REVISIONS
NO.
DATE
DESCRIPTION

Wall Assembly Section

DRAWINGS PROVIDED BY:

DATE:
9/27/2025
SCALE:
NTS
SHEET:
P-1

## Design Possibilities

Unlike conventional homes that rely on straight lines and load-bearing walls, domes give you complete freedom inside. Because the strength is in the shell itself, there are **no interior load-bearing walls**. That means walls can be placed wherever you want for layout and style — not because the structure demands it. This opens up options that simply aren't possible in box-built homes.

Want a wide-open great room with soaring ceilings? Easy. Prefer a tucked-away library, home office, or guest suite? Also easy. Need a loft overlooking the main living space or a basement level that ties seamlessly into the design? The dome shell supports it all. You're free to design based on lifestyle, not structural limitations.

Domes also shine in exterior design. You can build a single dome for simplicity, or connect multiple domes into a custom compound — each with its own function and personality. Breezeways, glass atriums, patios, and even underground tunnels can tie domes together, creating organic flow between spaces. A central living dome linked to guest domes, a studio dome, or an entertainment dome feels less like a house and more like a private retreat.

Lifestyle features elevate the experience even further. Skylights at the crown can pour sunlight into the heart of the home. Oversized windows can frame mountain ridges, forests, or desert horizons. And because there are no weak points in the structure, specialized rooms like safe rooms, wine cellars, home theaters, or yoga lofts fit right in without compromising strength.

Aesthetically, domes adapt to any vision. Stucco, stone, timber, earth-sheltering, or sleek modern finishes all work beautifully. Inside, you can go minimalist, rustic, or luxurious — the shape is unique, but the style is yours.

With domes, the design is not dictated by structural rules. It's dictated by your imagination. Whether you want a bright open retreat, a family home that grows with you, or a multi-dome compound with distinct spaces, the possibilities stretch far beyond what traditional construction can offer.

👉 You can explore **floor plans, as-built designs, and renderings of our signature domes** by visiting our [Designs & Floor Plans Gallery](#)

## Sustainability & Energy Efficiency

One of the strongest reasons people choose domes is sustainability. The shape itself is inherently efficient, enclosing the maximum interior space with the minimum exterior surface area. This means fewer opportunities for heat to escape in the winter or seep in during the summer, keeping the home naturally more stable year-round. Pair that with thick insulation and the thermal mass of concrete, and dome homes often cut energy bills by 30–50%.

Air circulation inside domes is smoother, eliminating hot and cold spots and reducing the strain on heating and cooling systems. Over decades, this efficiency isn't just a comfort feature — it's real savings that add up to tens of thousands of dollars. Domes also work beautifully with renewable systems such as solar, geothermal heating, and rainwater catchment. Their curved shells even help guide rainwater into collection systems, making off-grid living realistic.

Because domes last for centuries and require fewer repairs, they also reduce waste and resource consumption. Instead of cycling through new roofs, siding, and structural repairs every 20 years, dome owners enjoy a home that requires minimal upkeep. The dome model is one of true sustainability: less energy, less waste, more resilience.

👉 In the [Dome Home Master Guide](#), we show how energy savings can actually strengthen your financing application and lower long-term housing costs.

---

## Durability & Safety

When it comes to safety, domes are in a league of their own. Unlike conventional homes with vulnerable corners, rooflines, and combustible materials, domes are built from solid reinforced concrete. This makes them fire-resistant, storm-resistant, and earthquake-resilient. In wildfire zones, embers that ignite wood-framed houses simply slide off domes without finding a foothold. In tornadoes and hurricanes, wind flows over the curved surface instead of battering flat walls.

Earthquakes, too, highlight the strength of domes. Traditional houses concentrate stress in specific joints, which often fail first. Domes distribute that stress evenly across the shell, reducing damage and collapse risks. In regions prone to natural disasters, dome homes have often been the last structures standing when box-built homes around them fail.

Beyond natural resilience, domes offer longevity unmatched in conventional housing. A typical stick-built house may last 20–30 years with constant upkeep, but domes can endure centuries with minimal maintenance. Fewer repairs, less risk, and long-lasting value make them one of the safest housing options available today.

👉 Want to see how domes have held up in wildfires, tornadoes, and hurricanes? Our [Dome Home Master Guide](#) includes real-world examples and data.

---



# Cost to Build a Dome

The first question everyone asks is: **“What will it cost me?”**

The short answer: dome homes are **competitive with traditional custom homes** — but they deliver far more value over time. The long answer: costs vary based on size, finishes, complexity, and site conditions. Here’s what you need to know.

## Entry-Level Domes

If your property already has utilities and is relatively flat with ideal conditions, **entry-level domes can start in the low \$200,000s**. These “studio domes” or smaller residences are fully turnkey — not just a shell.

That means you’re getting:

- A complete **set of plans** (architectural + engineering)
- **Excavation and foundation** work
- The full **dome shell construction**
- All **interior framing** and layout
- Complete **mechanical, electrical, and plumbing systems**
- **Interior trim-outs and finishes** (floors, doors, fixtures, cabinetry)

From design through excavation to the final trim details, these homes are delivered **move-in ready — keys in hand**.

For many families, this creates a practical, efficient residence or mountain retreat in the **\$200,000–\$350,000 range** depending on finishes and size.

## Mid-Range Domes

For larger layouts or added customization, costs typically run **\$250–\$350 per square foot**. These builds often include:

- Multiple connected domes
- Basements or lofts
- Skylights, panoramic windows, or atriums
- Higher-end finishes and cabinetry

Mid-range domes usually land between **\$500,000–\$750,000**, striking a balance between comfort, aesthetics, and performance.

## Luxury & Compound Domes

At the top end, costs can exceed **\$400 per square foot**. These are expansive, highly customized residences or multi-dome compounds, often featuring:

- Solar + battery systems
- Geothermal loops
- Rainwater catchment and filtration
- Safe rooms, wine cellars, or theaters
- Imported finishes and high-end architectural details

Projects in this category often range from **\$750,000–\$1.5M+** depending on scope and features.

## Why Domes Cost Less Over Time

While upfront costs vary, domes **outperform traditional homes on lifetime value**. With conventional construction, you're guaranteed to replace shingles, repair siding, battle termites, patch leaks, and absorb rising utility bills. With domes, those costs disappear or shrink dramatically:

- **No shingles to replace** (ever)
- **No siding to repaint or repair**
- **No termites or pests** — nothing organic to feed on
- **No water damage** — the concrete shell is seamless
- **Lower energy bills** — typically **30–50% less**

Instead of a liability that wears out, a dome is a **long-term asset**, built to last for centuries.

### How to Pinpoint *Your* Dome's Cost

Because every property and design is different, the only way to lock in an accurate budget is with a **real plan set and materials list**. That's where our services come in:

1. **The Ultimate Dome Starter Pack**

The best way to begin. You'll complete our Lifestyle & Design Catalog, then our designers create a **custom floor plan and 3D rendering**. This helps you visualize your dome and get an early sense of cost — without the full investment of permit-ready plans.

2. **The Feasibility Study**

When you're ready to get precise, this is the tool. We produce **preliminary plan sets and a full materials list** so that every item can be priced line by line. This delivers a **true, project-specific cost** before you build.

 We recommend starting with the [Ultimate Dome Starter Pack](#)

# Financing & Insurance: How to Make a Lender Say “Yes”

For most people, the biggest question after “What will it cost?” is “Can I get financing?” The good news is yes — you can. The challenge is that many lenders simply haven’t seen dome projects before, so their first instinct is caution. That doesn’t mean your dome can’t be financed. It just means you need to present it in a way that feels clear, familiar, and low-risk to the people reviewing your file.

Here’s the secret: banks don’t actually care about whether your home is round or square. Underwriters only care if your project checks the right boxes. Their decisions revolve around four things:

1. **Comparables** — proof that similar-quality homes in the area sell for the right price.
2. **Predictable Cost** — a budget that adds up, backed by real quotes and a contingency buffer.
3. **Risk Controls** — insurance, stamped engineering, inspections, and site logistics.
4. **Exit Strategy** — confidence that once the dome is complete, it appraises, refinances, or sells like any other home.

If you can present those four pillars, your project stops looking unusual and starts looking like a safe, well-structured investment.

## Why Banks Say Yes

The most effective way to present your project is with a **professional, bank-ready packet** — the same structure underwriters already use for their files. Think of it as your project’s passport into the lending system. Instead of scattered paperwork, you show up with a binder (or clean PDF) that includes:

- **Plans & Stamped Engineering** (proving safety and code compliance)
- **Budget + Draw Schedule** (numbers that reconcile, tied to milestones)
- **Construction Timeline** (realistic, with buffers)
- **GC Credentials** (a licensed general contractor overseeing the build)
- **Risk Coverage** (builder’s risk insurance, wildfire/erosion strategies, safety plan)
- **Property Due Diligence** (survey, soils report, septic/utility approvals)
- **Comparables + Interior Renderings** (proof that reinforced-concrete homes already appraise and insure successfully)
- **Borrower Financials** (assets, reserves, down payment)

When you package your dome this way, you’re not asking the bank for a favor. You’re showing them a project that fits neatly into their existing system — safe, insurable, and built to proven standards

## From Education to Action

Financing is always a numbers game. Not every bank will say yes, but if you pre-screen lenders and apply broadly with a polished packet, you only need one approval to move forward.

And here's one of the most important hurdles: the **"no comparables" excuse**. Many appraisers don't know where to look when evaluating domes, so they fall back on "nothing to compare it to." In our [Dome Financing Playbook](#), we show you exactly how to overcome this — by walking in with your own packet of reinforced-concrete comps (ICF, tilt-up, CMU, luxury concrete builds) paired with polished interior renderings of your dome. This flips the conversation from "there's no data" to "here's the proof."

That's just one example of what the playbook covers. Inside, you'll also find:

- A **12-tab binder template** that mirrors exactly how underwriters structure files.
- **Checklists** for you and your GC so every document is bank-ready.
- **Pre-written email scripts** to contact dozens of lenders quickly and consistently.
- A **"Rejections & Responses" card** with the most common objections — and how to answer them.

👉 If this section gave you clarity, the playbook gives you the **full system** — everything you need to move from "dome dreamer" to "approved borrower." You can get it here: [Dome Financing Playbook](#)

# Our Process: From Dream to Dome

Building a dome isn't a cookie-cutter experience — every property, every design, and every family is unique. That's why we've built a clear roadmap that takes you from first ideas to a finished, permit-ready plan and, ultimately, a completed dome home. Here's how the journey works:

---

## Step 1: Initial Consultation

It all starts with a conversation. We'll walk through your goals, your must-haves, your timeline, and your property details so we can get a clear picture of your vision from the very beginning.

---

## Step 2: The Lifestyle & Design Catalog

Next, you'll receive our **Lifestyle & Design Catalog**, a detailed worksheet that helps you define exactly what you want in your dome. Here you'll tell us things like:

- Desired square footage
- Number of bedrooms and bathrooms
- One-story or two-story design
- Whether you want a basement
- Key lifestyle features (great room, skylights, lofts, safe room, wine cellar, etc.)
- Property details (utilities, slope, access, zoning)
- Must-have priorities and finishes
- Your target timeline for breaking ground

Once you complete and return the catalog, we have the foundation to start shaping your dome design.

---

## Step 3: The Ultimate Dome Starter Pack

For many clients, the best first step is our [Ultimate Dome Starter Pack](#) — a simple way to see your dome before you build.

With this package, our design team creates a **custom, to-scale floor plan** and a **full-color 3D rendering** of your dome, based on your Lifestyle & Design Catalog. You'll see your dome scaled to size with room dimensions, layouts, and labeled spaces — plus a rendering that shows exactly how it could look on your property.

### What's included:

- Instant download: Lifestyle & Design Catalog (fillable PDF)

- Custom to-scale floor plan (professional PDF with labeled rooms + dimensions, yours copyright-free)
- Full-color 3D rendering (exterior or interior)
- One round of minor revisions
- Delivery in 7–10 business days
- \$297 credit if you later upgrade to the Premium Feasibility Study

**Bonus Guides (Limited Offer):**

- *The Dome Buyer's Guide* (\$19.99 value)
- *The Dome Financing Playbook* (\$29.99 value)

Together, these add over \$50 in free value — making the Starter Pack worth more than \$350.

 [Reserve Your Custom Dome Floor Plan + 3D Rendering Here](#)





## The Feasibility Study

The most important step between inspiration and construction is the [Feasibility Study](#). Building a dome is not a cookie-cutter process — each site, each design, and each budget is unique. The Feasibility Study takes all the variables into account and delivers clear answers before serious money is spent.

This study reviews your property's soil, slope, access, and utility needs. It matches your design goals with realistic budgets and timelines, showing exactly how your dream dome translates into a buildable project. Instead of vague estimates, you walk away with a roadmap: what it will cost, how long it will take, and what challenges may arise.

For many clients, the Feasibility Study is the turning point — the moment a dream becomes a plan. It bridges the gap between inspiration and action, ensuring you're building with clarity and confidence.

👉 Our Feasibility Study builds on what's inside the [Dome Buyer's Guide](#) and [Dome Financing Playbook](#), tailoring the numbers and timelines specifically to your property.

---

## Ready To Take The Next Step?

You've learned the basics — the myths, the process, the design potential, and the real-world advantages of dome living. You've seen how domes outperform traditional houses in efficiency, safety, and longevity. Now the question is: what's next?

The smartest move is simple: take the next step with a **Feasibility Study**. It's the tool that turns your ideas into a real, actionable plan. Whether you're considering a single retreat dome, a family residence, or a multi-dome compound, the Feasibility Study gives you the confidence to move forward.

Ready to explore what's possible for you? Let's talk.

✉ Email: [contact@domehomebuilders.com](mailto:contact@domehomebuilders.com)

🌐 Website: [www.domehomebuilders.com](http://www.domehomebuilders.com)