NOMAD Micro Home

Groundbreaking 10’ x 10’ home maximizes efficiency with style

NOMAD’s designers and engineers have certainly pushed the limits of small-space living. By incorporating innovative loft access, abundance of natural light, and varied ceiling heights, this tiny home feels truly bigger than its four walls. “We knew that a space this size could feel comfortable with enough thought. Our goal was to produce a liveable, efficient home with minimal impact on yard space and the environment”. 35 years of design and home-building experience provided the answers. NOMAD’s living room, kitchen, bathroom, stair, bedroom, and storage are all seamlessly integrated: access to the loft doubles as a kitchen, a window adds light to one area and a higher ceiling to another, a bathroom doubles as a shower, storage that can be used as seating, and so on. These features are not obvious at first glance, but all are essential to NOMAD’s livability.

NOMAD’s concept expanded significantly when it was engineered for home assembly and shipment worldwide. Following successful prototype engineering, developing, and testing, NOMAD is now in production in British Columbia, Canada.
What makes a house a home—a comfortable home, for that matter—is relative. Yet whether an igloo, teepee, yurt, or grass hut, what's certain is that people all over the world have lived successfully in small spaces throughout the course of history.

A micro home incorporates all the essential amenities of a regular house on a significantly smaller scale, so the size and shape of its functional components are each carefully considered. Additionally, designing a compact house necessitates compromise when it comes to the traditional expectation of designated rooms for specific uses; multipurpose rooms and multifunctional convertible furniture are key. In essence, spatial constraints breed innovations in design, storage, and fixtures that contribute to a more efficient home.

One critical aspect of small-space design is creating the illusion of more rather than less, making the distinction between perceived and real square footage. In NOMAD's case, the living room, kitchen, bathroom, stair, bedroom, and storage are all seamlessly integrated. The staircase doubles as overhead kitchen shelves, the one-piece bathroom incorporates a shower stall, and bedroom cabinets are used as seating. Window size and placement, view angles, natural light, varied ceiling height, material selection, and colour choice are all key factors. Therefore, making a micro house feel like a home really isn't contingent on size but, rather, its layout and aesthetic features.
Imagine... a house small enough that it could be built anywhere and barely noticed, so inexpensive that students and regular wage-earners could afford to buy it, and engineered so that it could be assembled within hours using unskilled labour. Well, you'd have a product that 3.5 billion homeowners worldwide might like for their back yard or recreational property, as well as a dwelling that governments, charities, and corporations would also be interested in using to address issues of affordable housing, disaster relief, and remote industry. NOMAD addresses each one of these needs while still offering the comfort of a real home, versus more utilitarian trailers or shipping containers that are usually employed for these purposes.

NOMAD can be ordered online, customized with a selection of add-on components, and then shipped flat-packed in a truck or standard 20’ shipping container to any destination worldwide. Its compact size and lightweight structure render it much cheaper to ship than conventional flat-packed homes. Upon reaching its destination, NOMAD is easily assembled within days by two people with no more than handyman skills.

No other form of real estate has been more accessible to the middle and lower income sectors, can be shipped more economically worldwide, or caters to such a wide range of housing markets.
It all starts with efficient living space that is less expensive to service

For most people, going “off grid” conjures thoughts of living in the wilderness, chopping wood, and fetching water from the river—that doesn’t really cut it for most of us. People expect all the ‘luxuries’: a toilet, shower, kitchen, bedroom, heating, power… the basic conveniences of urban life.

Trying to live a sustainable lifestyle is often confusing and expensive. Cash and mortgages are difficult to obtain for land and choosing and sourcing the right equipment can be complicated. Most people live the status quo, hoping that an opportunity will come along that has eco-conscious living neatly packaged for them. As challenging as going green can be, it all starts with an efficient home that is less expensive to service.

NOMAD is well positioned to support off-grid technologies while providing the traditional comforts of home. Our design team has customized a slate of innovative green technologies that includes rainwater collection, atmospheric water generation, solar power, sewer treatment, and on-board vertical gardening, all enabling NOMAD to exist completely off grid.

NOMAD’s basic design provides natural ventilation and cooling as air movement from the open window on the main floor exits through the open window on the upper floor by natural convection. In winter, fresh air is continuously drawn from a permanent vent located behind the fridge, which is tempered as it travels past the coils.

These technologies have been developed by Nomad’s design team of consultants and engineers allowing NOMAD, or a community of NOMADs, to exist without municipal servicing.
Space that can expand to meet your needs, or family as it grows

One of the best things about NOMAD is that it's designed to be modular. Two or more NOMADs are easily interconnected back to back or stand side by side as individual townhomes. NOMAD's living space can expand to meet your needs or your growing family. Increasing contiguous main floor living space can also provide an accessible bedroom for those who have difficulty negotiating stairs. Combinations of NOMAD's three models—Live, Space, and Grow—can produce numerous customized layouts within footprints of 200 to 500 square feet.

Multiple NOMADs can be quickly assembled to produce low-impact "pocket communities" within existing urban neighbourhoods, or larger communities in suburban areas. The samples on the right are shown on a conventional 33’ x 120’ single-family residential lot.

NOMAD’s off-grid systems can also be applied to parcels of land that don’t have access to municipal water, or sewer. This facilitates fast and cost-effective development of remote affordable communities, eco-resorts, housing for remote industry, and post-disaster relief.
General Specifications

SERVICES:

Sewer:
NOMAD can be connected to an existing municipal sewer or septic field. Alternatively, NOMAD can be outfitted with a composting toilet or connect to the NOMAD Sewer Treatment Plant (additional cost).

Water:
Conventional 1/2” water line connection, or the NOMAD Water Generation Plant (additional cost).

Power:
NOMAD can be powered by any conventional power source, or NOMAD’s solar power kit (additional cost)

NOTE: All service connections should be installed by a certified tradesperson

ARCHITECTURAL:

- Structure: patented system using metal insulated panels
- Insulation: floor and roof R-32, walls R-24 (can be upgraded)
- Exterior Finish: pre-finished metal siding
- Windows: vinyl frame, double glazed
- Entry Doors: double door, paint-grade fibreglass, full light
- Roof, Fascia, Gutter, Downspout: pre-finished metal
- Interior Wall Finish: paintable hardboard panels
- Interior Floor Finish: vinyl plank
- Cabinets: white laminate
- Kitchen Counter: white laminate
- Kitchen Sink: stainless steel
- Kitchen Faucet: single control
- Toilet: RV-style, foot-operated, flushing
- Bathroom Floor: synthetic wood slats over custom fibreglass base
- Bathroom Walls: pre-finished metal panel
- Bathroom Door: opaque glass in aluminum frame
- Stair/Shelving: 1 1/2”-thick maple plywood
- Baseboards/Trim: painted MDF

PLUMBING | MECHANICAL:

- Hot Water: propane, or electric on-demand by certified tradesperson
- Heat: propane, or electric baseboard by certified tradesperson
- Ventilation: bathroom fan (included) by certified tradesperson

ELECTRICAL:

- Service Panel: exterior-mounted by certified tradesperson
- Kitchen Light: LED task lighting (included) under kitchen shelf
- Bathroom Light: LED wall light (included)
- Outlets: through exterior wall by certified tradesperson
- Switches: wireless to bathroom and kitchen lights (included) (110v)
Off-Grid Specifications

WATER GENERATION:

- Process: atmospheric water generation
- Capacity: 20 US gallons per day
- Size: 16” x 16” x 24”
- Electrical: 12V, 2.4kWh/gallon
- Filter system: sediment filter, pre-carbon filter, ultrafine filter, post carbon filter, UV sterilizer light

WATER TANKS:

- Materials: food-grade polyethylene (MDPE) complies with AS2070, FDA and HPB Regulatory standards for food contact, brass and nylon threaded fittings.
- Size: 71” x 20” x 9.5”
- Capacity: 50 US Gallons
- Weight (full): 440 lbs
- Colour: Olive Green

SEWER TREATMENT:

NOMAD uses a wastewater treatment system that is designed for treating domestic wastewater generated by normal household activities. The system consists of a single tank utilizing the Extended Aeration Activated Sludge Process and is capable of producing an effluent that meets or exceeds applicable state discharge standards. Uniquely designed based on modern concepts, the system has been successfully tested in accordance with National Sanitation Foundation (NSF) Standards 245 and 40 at an ANSI certified lab. It has also undergone strenuous testing, meeting ANSI/NSF standards 40 and 245 requirements, and is approved for use throughout the United States.

- Size: 48” X 84” X 32”H
- Capacity: 4 person
- Materials: polyethylene tank, schedule 40 PVC pipe
- Electrical: solar electric 12V, 1.2 to 1.8 amp
- Maintenance: 60-year lifecycle, aerator changed every 10 years

SOLAR POWER:

- Under redevelopment
Live + Space

Combinations
Live + Space

Combinations
Live + Grow

Combinations
Zero + Grow

Combinations

Note: Features shown within NOMAD Grow are additional to the base cost.
NOMAD Cube
12x12x12