Kolomaki

Self-Supporting Cellar Quick

EN

Comprehensive Documentation and Technical Specification of Self-Supporting Cellars Quick

Self-supporting plastic underground cellar Quick. Before starting the installation of the product, please read this manual carefully and follow it! Failure to follow the installation manual voids the warranty.

EN

Material: certified food-grade polypropylene
Model: Quick 1, 2, 3, 4, 5, 6
Edition: 01. 04. 2025

www.kolomaki.com

Contents

MANUFACTURER:
Kolomaki, s. r. o.,
Komenského 576,
273 71 Zlonice, Česká Republika

www.kolomaki.com
+420777581000
info@kolomaki.com

SERVIS:
DČOV servis, s. r. o.,
Werichova 658/23,
779 00 Olomouc 9-Nové Sady, Česká Republika

+420778305105
info@dcovservis.cz

1. Basic Information

Quick cellars are waterproof underground cellars made of composite material. They are intended as storage spaces for food and liquids at a consistently low temperature and for housing technological and other equipment in an enclosed space below ground level, with easy adjustment of temperature and humidity conditions.

Kolomaki Quick offers two installation variants:

Concrete-Encased Cellar

A variant intended for installation on a concrete base with subsequent encasement in concrete. Ideal for locations with high underground pressure, under parking lots, near roads, or in places with groundwater.

Self-Supporting Cellar

A variant intended for installation on a gravel bed with gravel backfill. Ideal for fast, one-day installation in areas without groundwater and under normal pressure. Self-support is ensured by a metal structure integrated into the cellar's reinforcements.

Construction Advantages

- Adaptation to Conditions: Flexible design allows installation in various terrain conditions.
- Choice of Entry Points Based on Terrain: Entry options tailored to the specific installation site.
- Unlimited Storage Space Dimensions: Customizable sizes based on customer needs.
- Selection of Additional Features: Option to equip the cellar based on individual requirements.
- 19-Year Warranty: Long-term reliability and guaranteed quality.
- Waterproofing: Protection against moisture and external influences.
- Environmentally and Chemically Pure Material: Safe for storing food and liquids.

Construction Details

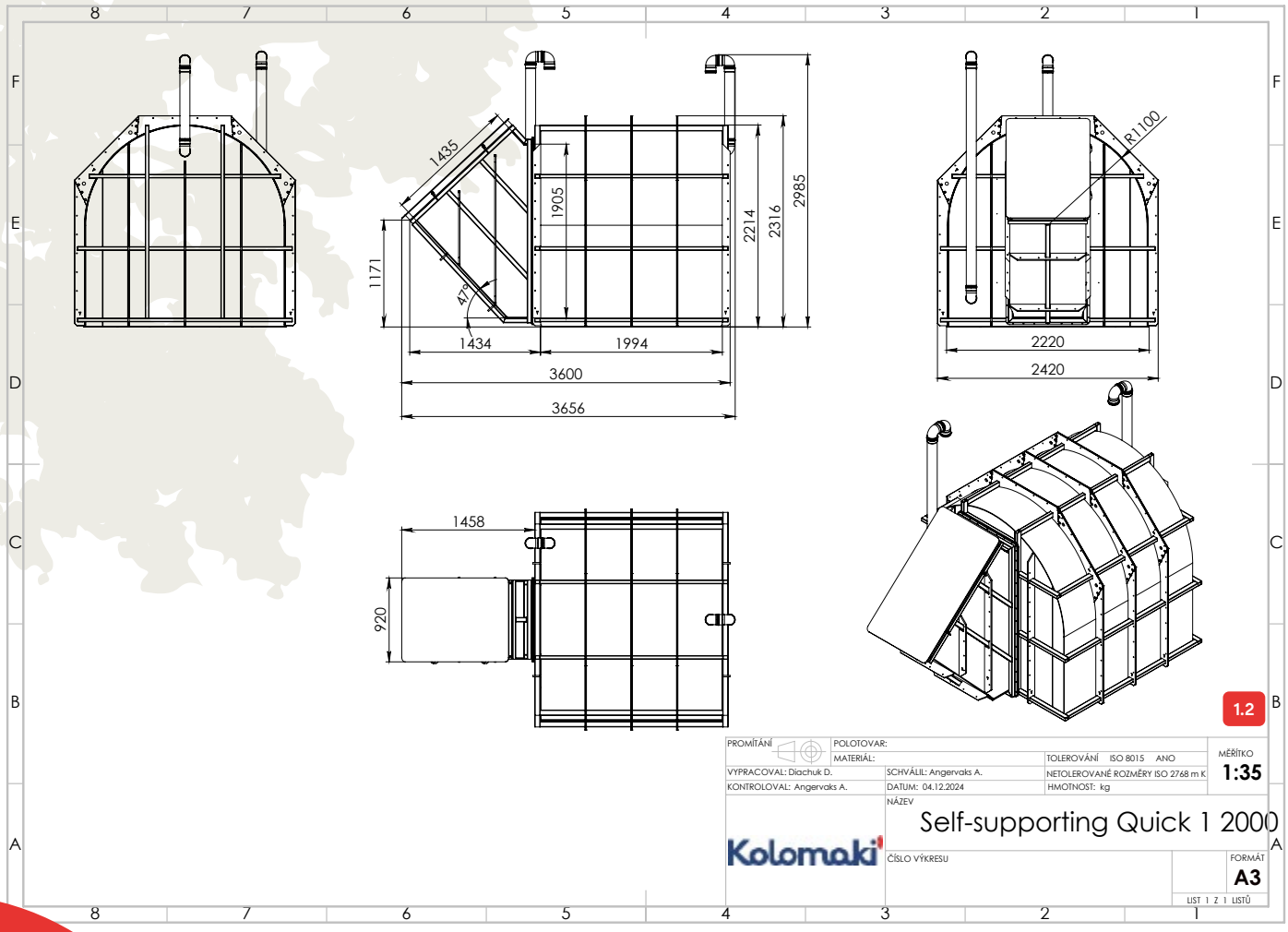
The structure is made of welded polypropylene panels with thickness ranging from 8 mm (arched construction) to 15 mm (other parts). Around and inside the cellar is a galvanized steel structure for long durability. Interior equipment may include:

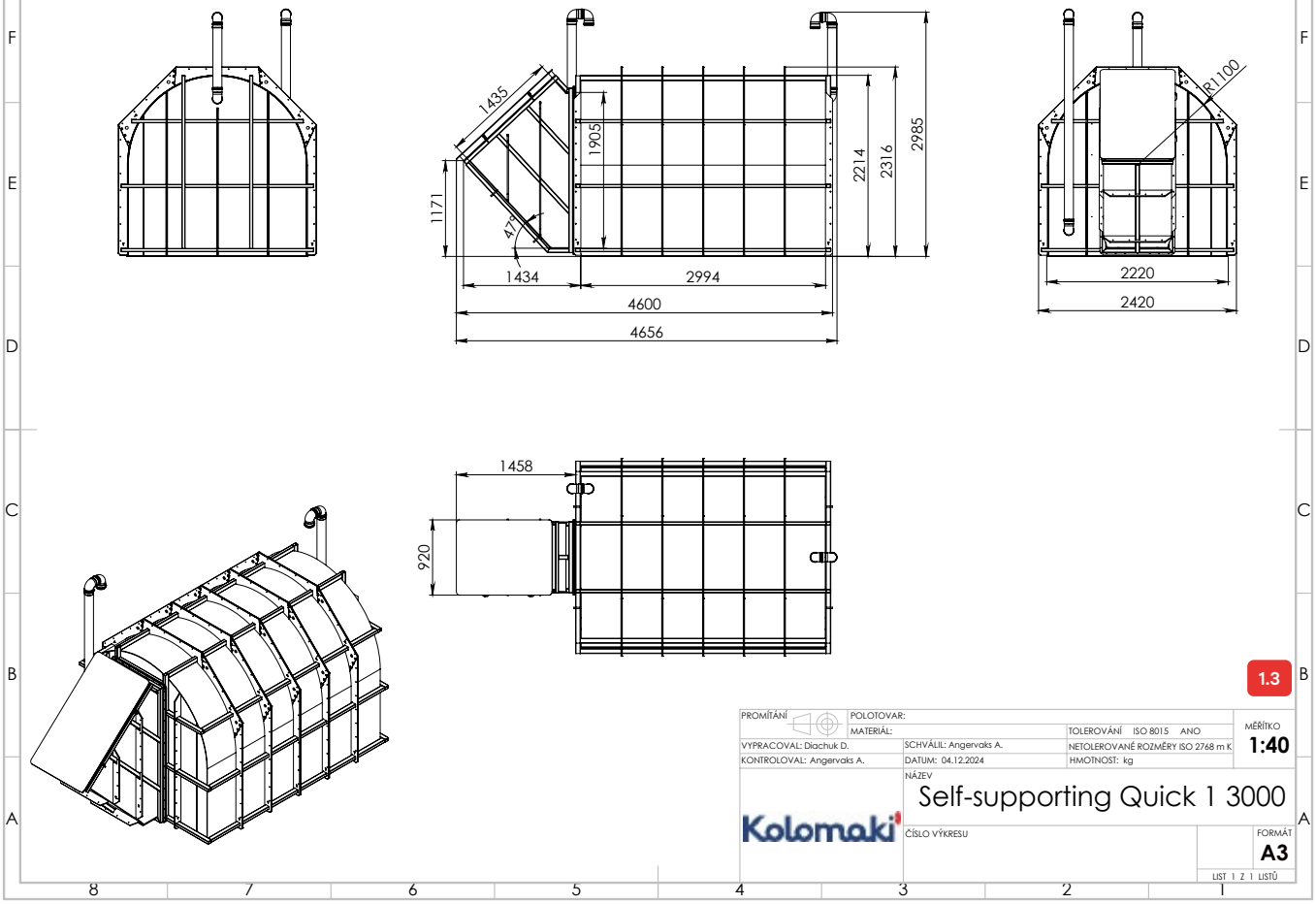
- Aluminum stairs
- Shelves made of joinery plywood
- LED lighting mounted on KVH beam
- OSB flooring
- Interior plastic doors with insulation board

The cellar door is made of polypropylene and may be covered with wood or made from wood, metal, or a combination of both.

2. Parameters

Quick 1	2000	3000	4000
Floor Area (m²)	4.4	6.6	8.8
Overall Dimensions (L×H×W, mm)	3600 × 2316 × 2420	4600 × 2316 × 2420	5600 × 2316 × 2420
Weight (kg)	650	760	870
Entrance Door	Yes	Yes	Yes
Stairs	Yes	Yes	Yes
Entry	Inclined	Inclined	Inclined
Metal Reinforcement	Yes	Yes	Yes
Ribs	Yes	Yes	Yes





1.3

PROMÍTÁNÍ	POLOTOVAR:	
	MATERIÁL:	TOLEROVÁNÍ ISO 8015 ANO
VYPRACOVAL: Diachuk D.	SCHVÁLIL: Angervaks A.	NETOLEROVANÉ ROZMĚRY ISO 2768 m K
KONTROLOVAL: Angervaks A.	DATUM: 04.12.2024	HMOTNOST: kg

MĚŘÍTKO 1:40

NÁZEV

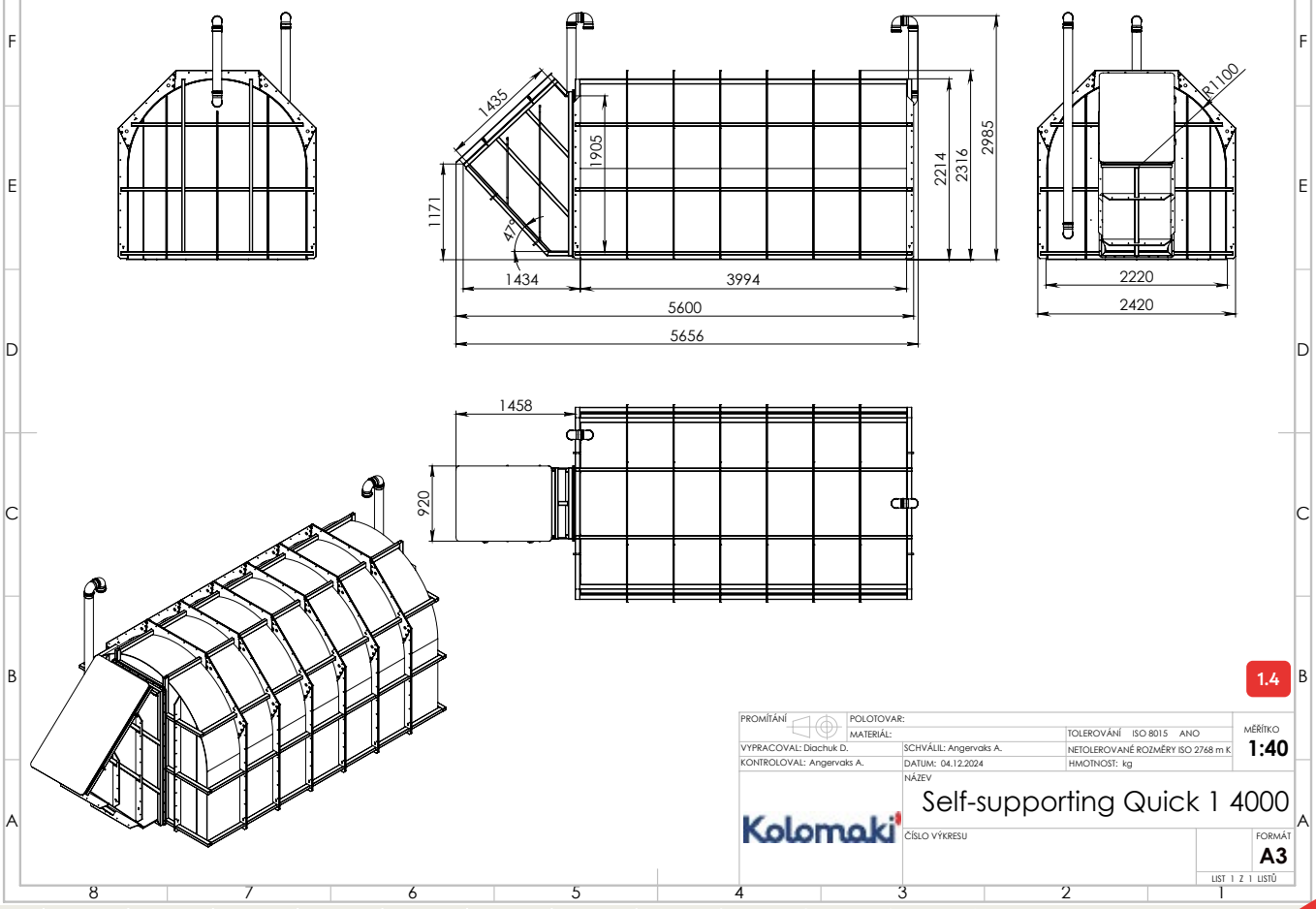
Self-supporting Quick 1 3000

Kolomaki

ČÍSLO VÝKRESU

FORMÁT A3

LIST 1 Z 1 LISTŮ



1.4

PROMÍTÁNÍ	POLOTOVAR:	
	MATERIÁL:	TOLEROVÁNÍ ISO 8015 ANO
VYPRACOVAL: Diachuk D.	SCHVÁLIL: Angervaks A.	NETOLEROVANÉ ROZMĚRY ISO 2768 m K
KONTROLOVAL: Angervaks A.	DATUM: 04.12.2024	HMOTNOST: kg

MĚŘÍTKO 1:40

NÁZEV

Self-supporting Quick 1 4000

Kolomaki

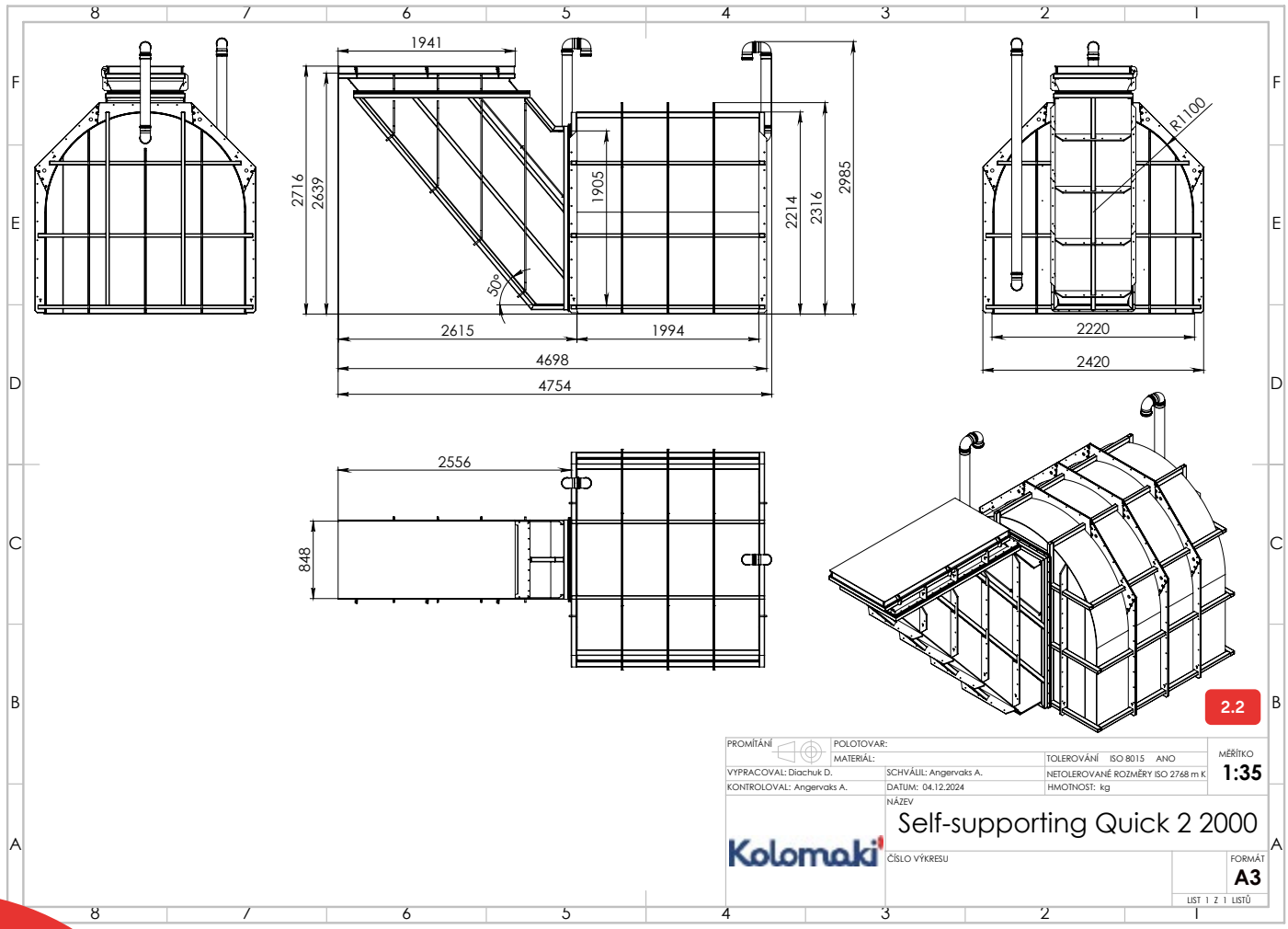
ČÍSLO VÝKRESU

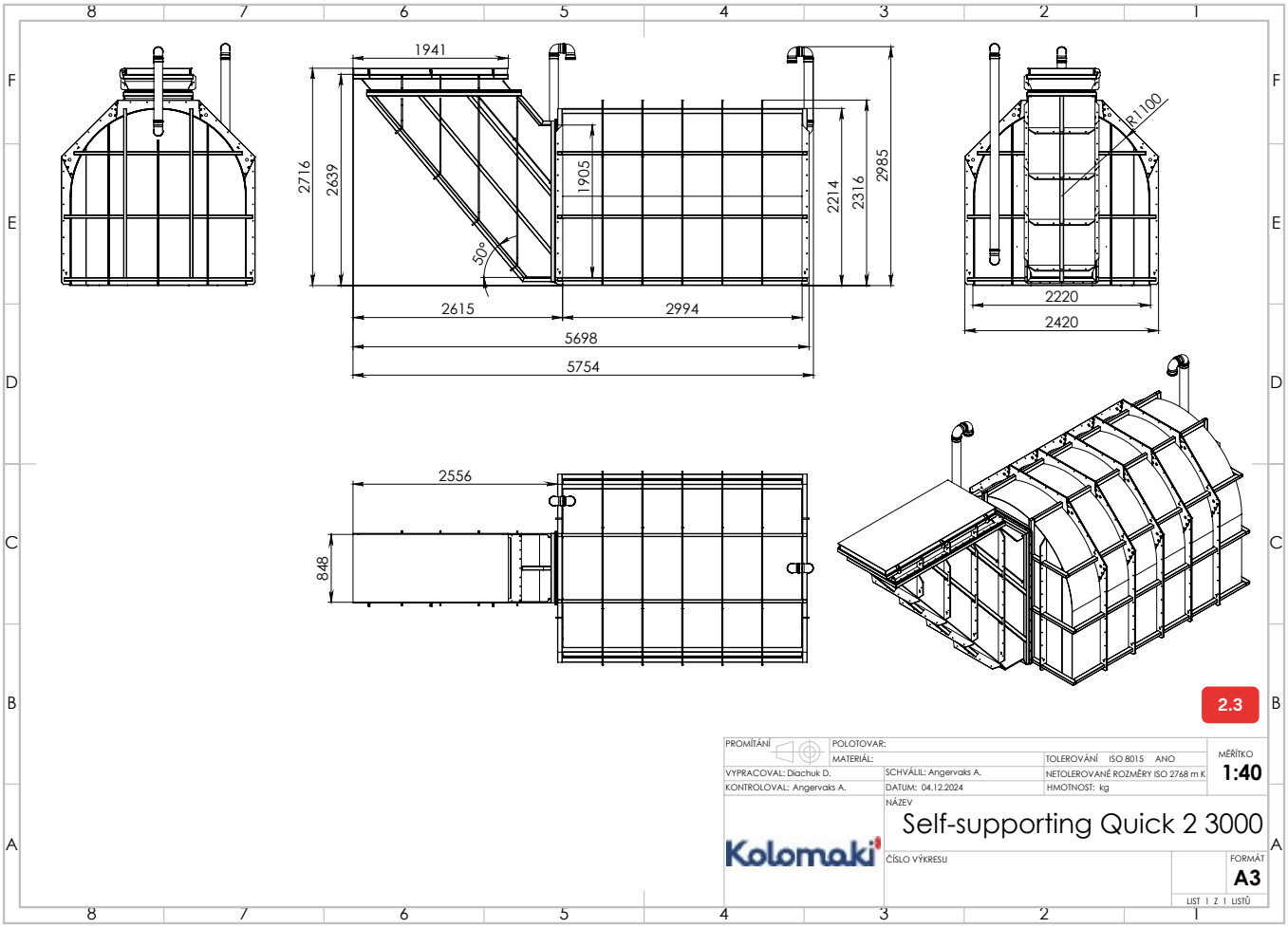
FORMÁT A3

LIST 1 Z 1 LISTŮ

Quick 2

	2000	3000	4000
Floor Area (m²)	4.4	6.6	8.8
Overall Dimensions (L×H×W, mm)	4698 × 2702 × 2420	5698 × 2702 × 2420	6698 × 2702 × 2420
Weight (kg)	690	800	910
Entrance Door	Yes	Yes	Yes
Stairs	Yes	Yes	Yes
Entry	Horizontal	Horizontal	Horizontal
Metal Reinforcement	Yes	Yes	Yes
Ribs	Yes	Yes	Yes





2.3

PROMÍTÁNÍ	POLOTOVAR:		
	MATERIÁL:	TOLEROVÁNÍ ISO 8015 ANO	MĚŘÍTKO 1:40
VYPRACOVAL: Diachuk D.	SCHVÁLIL: Angervaks A.	NETOLEROVANÉ ROZMĚRY ISO 2768 m K	
KONTROLOVAL: Angervaks A.	DATUM: 04.12.2024	HMOTNOST: kg	

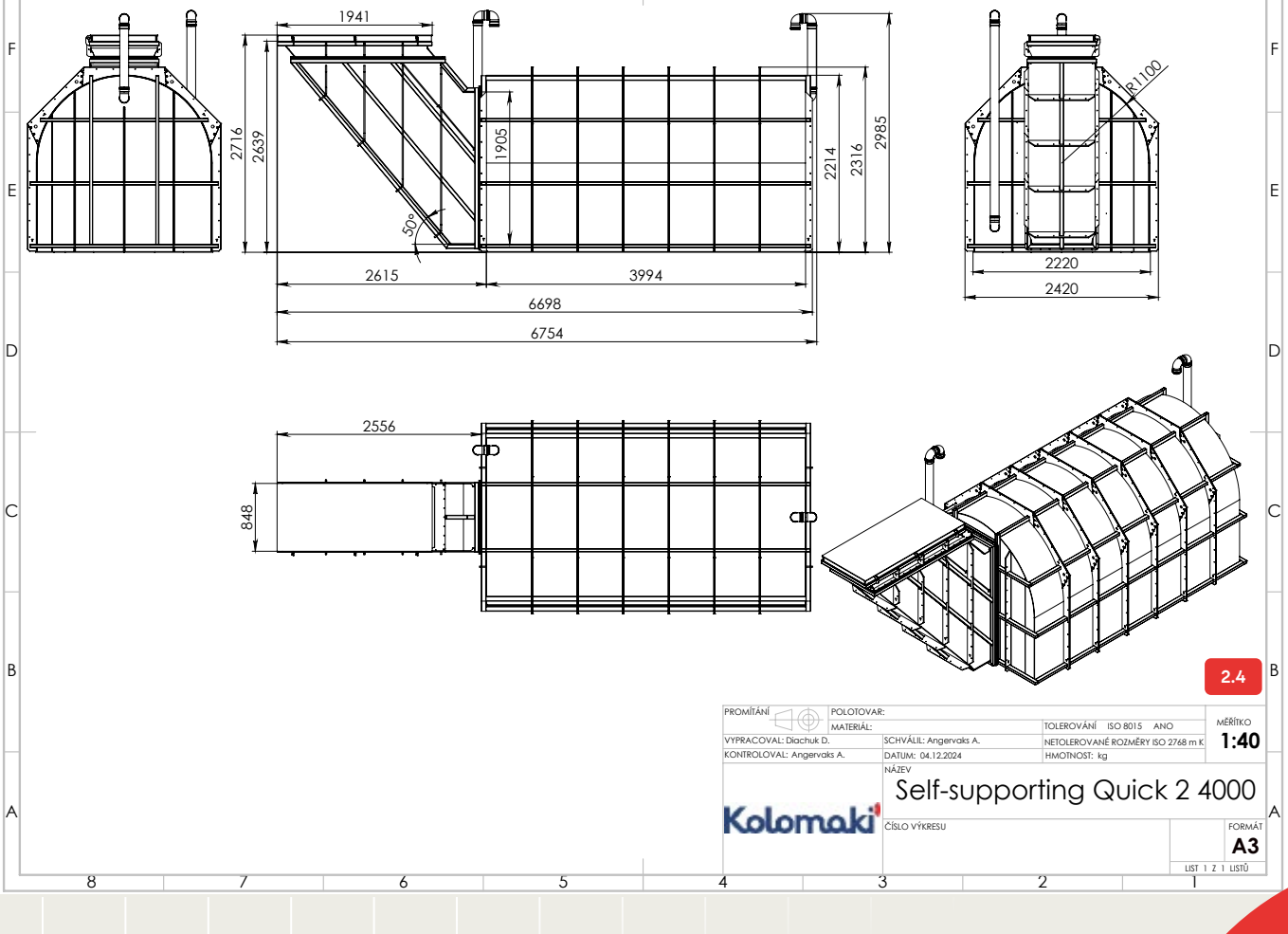
NÁZEV: Self-supporting Quick 2 3000

Kolomaki

ČÍSLO VÝKRESU

FORMÁT A3

LIST 1 Z 1 LISTŮ



2.4

PROMÍTÁNÍ	POLOTOVAR:		
	MATERIÁL:	TOLEROVÁNÍ ISO 8015 ANO	MĚŘÍTKO 1:40
VYPRACOVAL: Diachuk D.	SCHVÁLIL: Angervaks A.	NETOLEROVANÉ ROZMĚRY ISO 2768 m K	
KONTROLOVAL: Angervaks A.	DATUM: 04.12.2024	HMOTNOST: kg	

NÁZEV: Self-supporting Quick 2 4000

Kolomaki

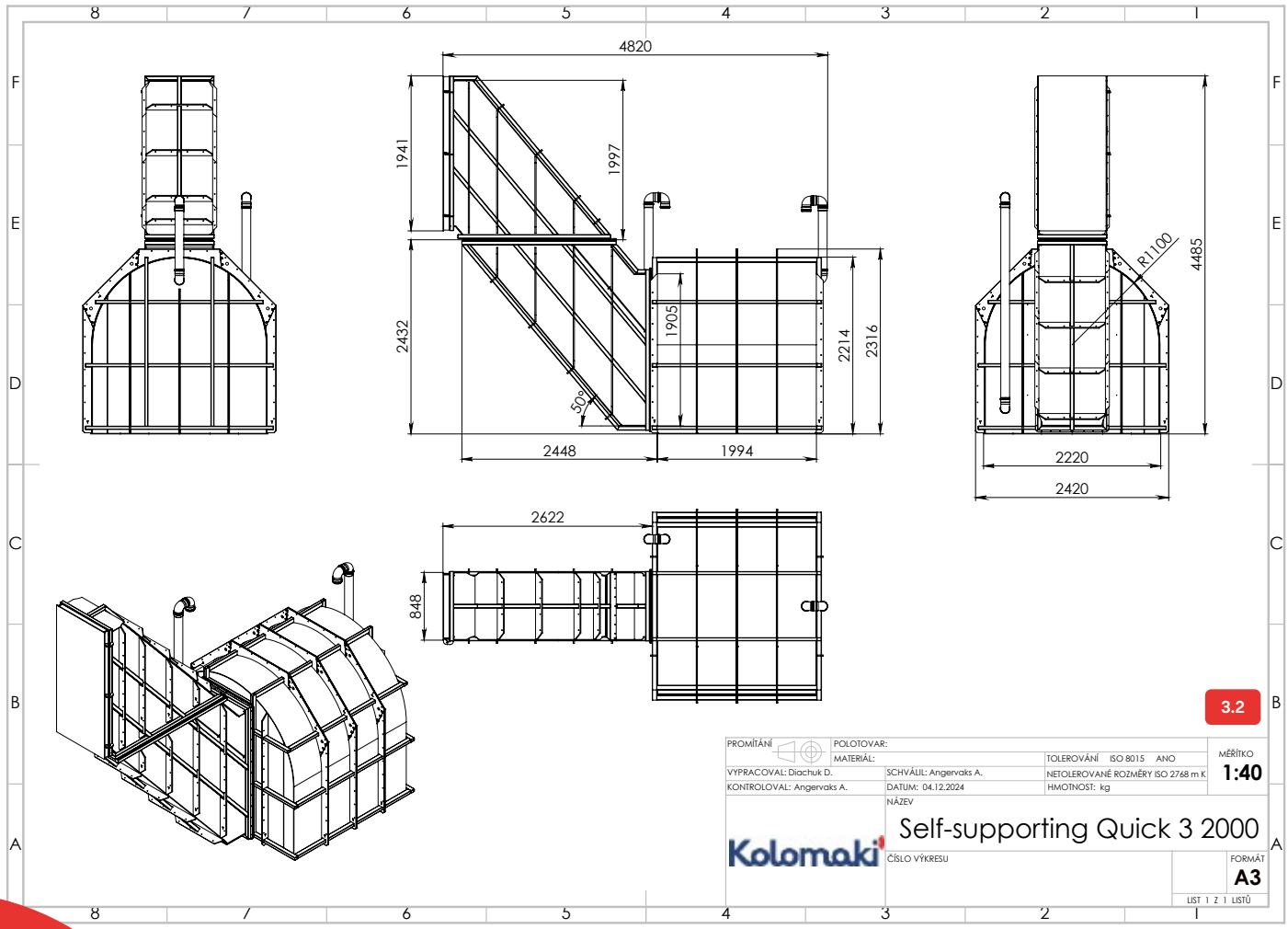
ČÍSLO VÝKRESU

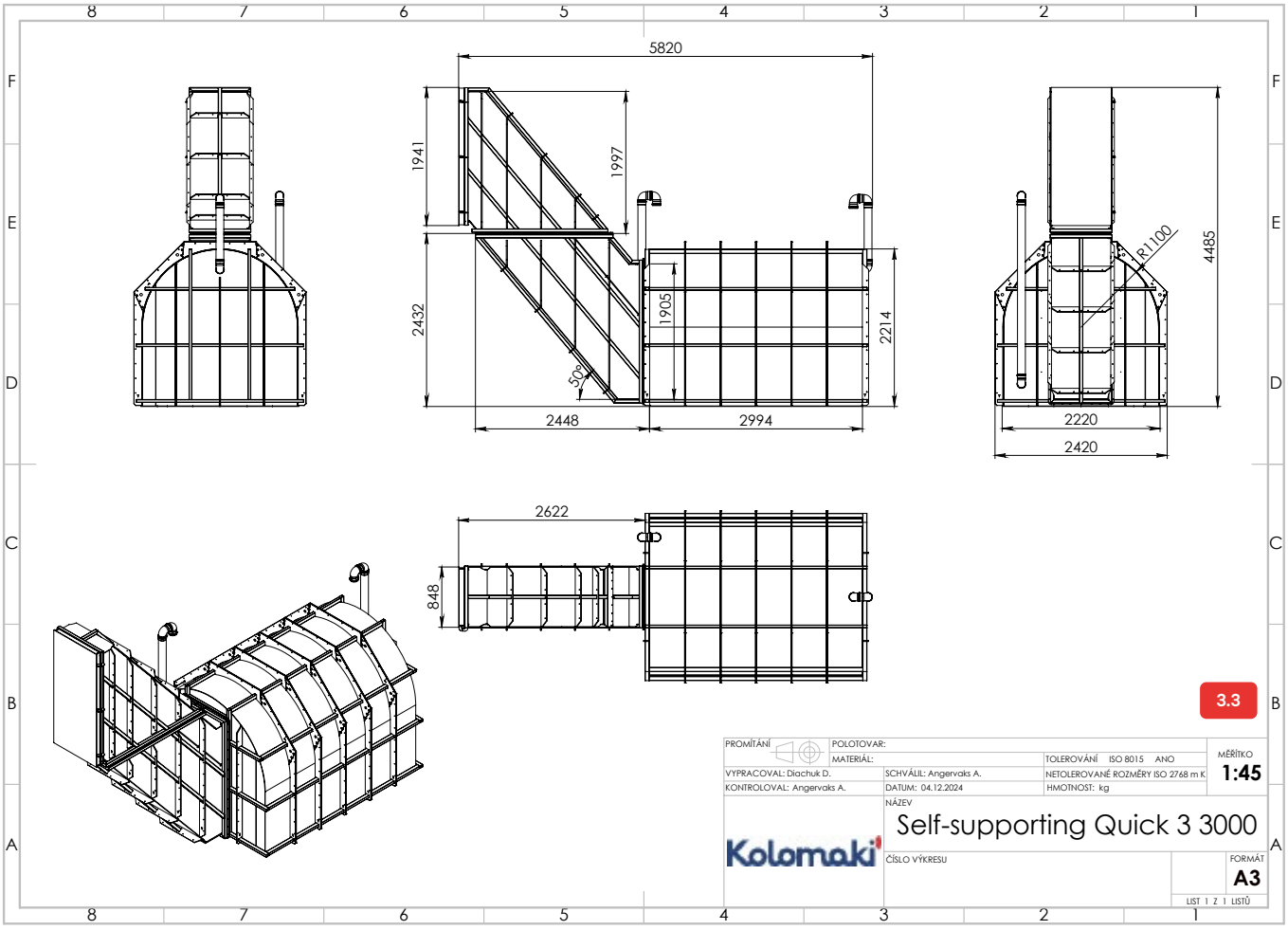
FORMÁT A3

LIST 1 Z 1 LISTŮ

Quick 3

	2000	3000	4000
Floor Area (m²)	4.4	6.6	8.8
Overall Dimensions (L×H×W, mm)	4820 × 4471 × 2420	5820 × 4471 × 2420	6820 × 4471 × 2420
Weight (kg)	740	850	960
Entrance Door	Yes	Yes	Yes
Stairs	Yes	Yes	Yes
Entry	Vertical	Vertical	Vertical
Metal Reinforcement	Yes	Yes	Yes
Ribs	Yes	Yes	Yes





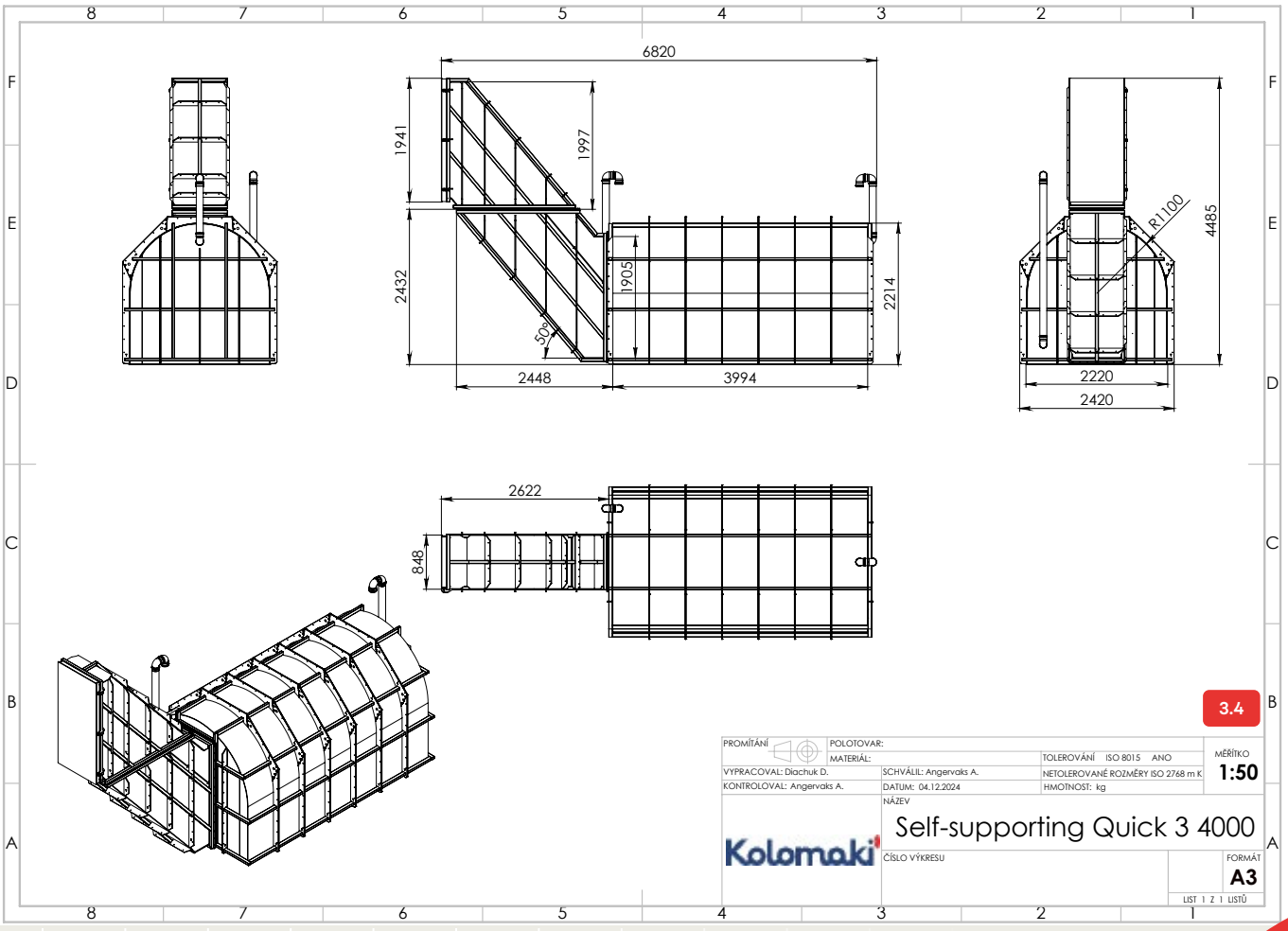
3.3

PROMÍTÁNÍ	POLOTOVAR:		MĚŘÍTKO 1:45
	MATERIÁL:	TOLEROVÁNÍ ISO 8015 ANO	
VYPRACOVAL: Diachuk D.	SCHVÁLIL: Angervaks A.	NETOLEROVANÉ ROZMĚRY ISO 2768 m K	
KONTROLOVAL: Angervaks A.	DATUM: 04.12.2024	HMOTNOST: kg	

Kolomaki

NÁZEV: Self-supporting Quick 3 3000

ČÍSLO VÝKRESU | FORMÁT A3 | LIST 1 Z 1 LISTŮ



3.4

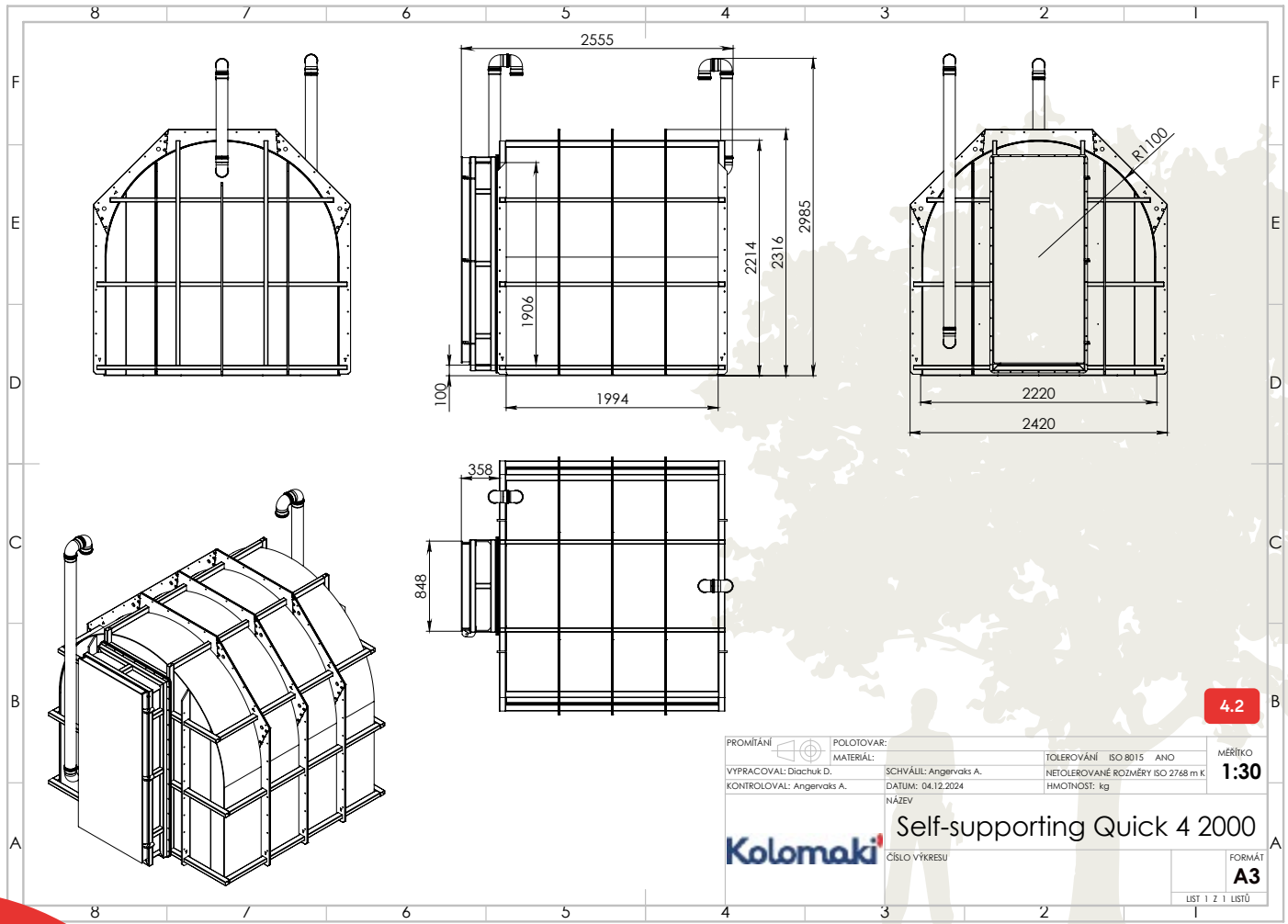
PROMÍTÁNÍ	POLOTOVAR:		MĚŘÍTKO 1:50
	MATERIÁL:	TOLEROVÁNÍ ISO 8015 ANO	
VYPRACOVAL: Diachuk D.	SCHVÁLIL: Angervaks A.	NETOLEROVANÉ ROZMĚRY ISO 2768 m K	
KONTROLOVAL: Angervaks A.	DATUM: 04.12.2024	HMOTNOST: kg	

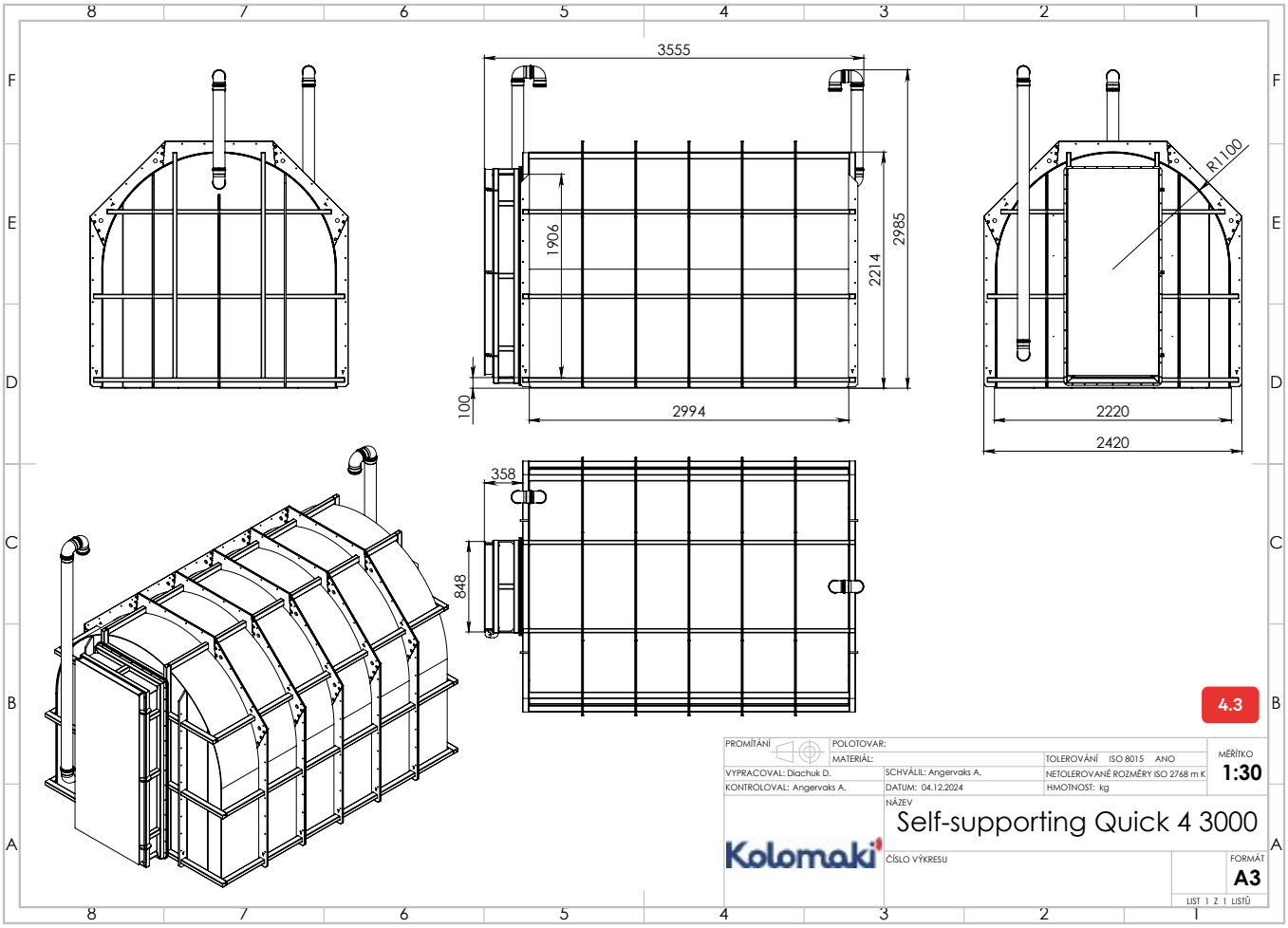
Kolomaki

NÁZEV: Self-supporting Quick 3 4000

ČÍSLO VÝKRESU | FORMÁT A3 | LIST 1 Z 1 LISTŮ

Quick 4	2000	3000	4000
Floor Area (m²)	4.4	6.6	8.8
Overall Dimensions (L×H×W, mm)	2555 × 2316 × 2420	3555 × 2316 × 2420	4555 × 2316 × 2420
Weight (kg)	630	740	850
Entrance Door	Yes	Yes	Yes
Stairs	Yes	Yes	Yes
Entry	Vertical	Vertical	Vertical
Metal Reinforcement	Yes	Yes	Yes
Ribs	Yes	Yes	Yes





4.3

PROMÍTÁNÍ	POLOTOVAR:		MĚŘÍTKO 1:30
	MATERIÁL:	TOLEROVÁNÍ ISO 8015 ANO	
VYPRACOVAL: Diachuk D.	SCHVÁLIL: Angervaks A.	NETOLEROVANÉ ROZMĚRY ISO 2768 m K	
KONTROLOVAL: Angervaks A.	DATUM: 04.12.2024	HMOTNOST: kg	

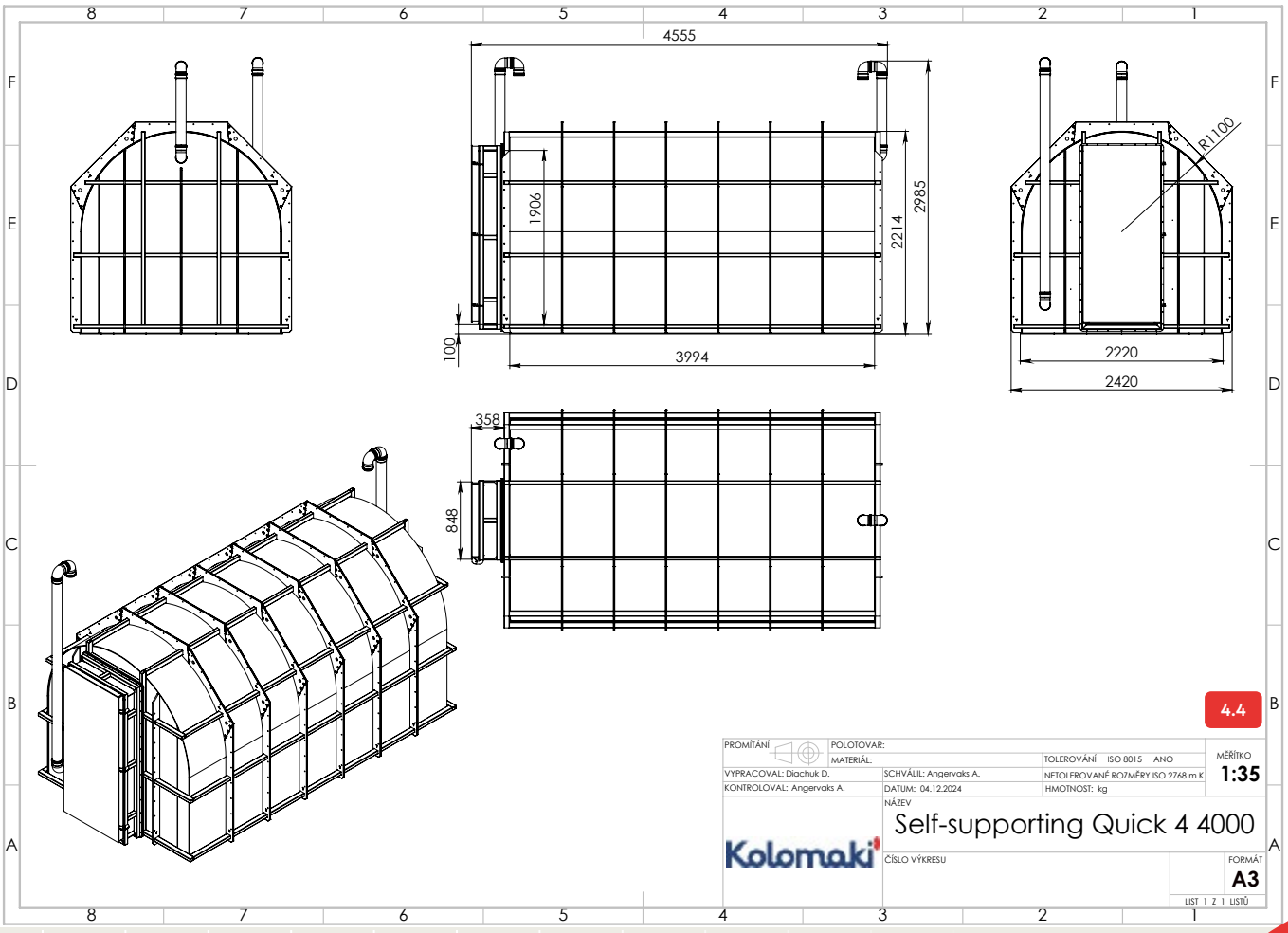
NÁZEV: Self-supporting Quick 4 3000

Kolomaki

ČÍSLO VÝKRESU

FORMÁT A3

LIST 1 Z 1 LISTŮ



4.4

PROMÍTÁNÍ	POLOTOVAR:		MĚŘÍTKO 1:35
	MATERIÁL:	TOLEROVÁNÍ ISO 8015 ANO	
VYPRACOVAL: Diachuk D.	SCHVÁLIL: Angervaks A.	NETOLEROVANÉ ROZMĚRY ISO 2768 m K	
KONTROLOVAL: Angervaks A.	DATUM: 04.12.2024	HMOTNOST: kg	

NÁZEV: Self-supporting Quick 4 4000

Kolomaki

ČÍSLO VÝKRESU

FORMÁT A3

LIST 1 Z 1 LISTŮ

3. Transport and Unloading

The transport of Quick cellars can be arranged in several ways: via the client's own transportation, by Kolomaki company vehicles, or through a transport company. For transport, we recommend using a trailer or truck.

Unloading at the Installation Site

During unloading, appropriate equipment must be prepared. We recommend using, for example, an excavator, crane, or forklift. Ensure a sufficient number of persons for the safe execution of all tasks.

Safety Instructions

- **Caution During Handling**
  Handling during transport, loading, and unloading must be performed with maximum care to avoid damaging the product.
- **No Rough Handling**
  Make sure there are no impacts or shocks that could damage the cellar structure.
- **Proper Securing During Transport**
  The cellar must be properly secured during transport. Make sure the securing does not exert excessive pressure, which could lead to product deformation.
- **Caution at Low Temperatures**
  Proceed with particular care at temperatures below 5 °C. In such conditions, polypropylene becomes brittle and more susceptible to damage from impacts.

4. Installation

4. 1. Placement Conditions

Before installing the Quick cellar, it is necessary to carefully select a suitable excavation site:

- **Distance from Buildings:**
  The excavation must be located at least 1 meter from any structure. Proximity to buildings can cause load stress leading to cellar deformation. The cellar must not be built over or burdened by other structures.
- **Protection Against Potential Hazards:**
  The excavation should be located away from tree roots or other obstacles that could damage the cellar walls.
- **Installation on a Slope:**
  If the cellar is installed on a slope, it is necessary to assess the terrain to prevent landslides or other complications. A static calculation and stability assessment of the subsoil or slope should be conducted by a qualified structural engineer or designer.
- **Excavation Dimensions:**
  The excavation must be large enough to allow for the required working space. Excavation dimensions are provided in section 4.4 Standard Installation.
- **Solid and Permeable Base:**
  For proper anchoring, the base must be solid enough. The soil surrounding the cellar should be water permeable. A hydrological soil permeability assessment is often part of the building permit.
- **Presence of Groundwater:**
  It is recommended to select a site without groundwater. If groundwater is present, installation is best carried out in summer or winter months. To reduce the risk of deformation under such conditions, the concrete--encased variant is recommended.
- **Protection from Sunlight:**
  For better thermal insulation, choose a location without direct or persistent strong sunlight.

4. 2. Backfill Material

The backfill material must ensure solid anchoring of the cellar in the construction excavation and prevent its movement. It must not contain sharp or hard objects that could damage the cellar structure. Suitable material is aggregate of fraction 8/16 mm. This material is compacted around the cellar without mechanical equipment, only by pressure force of approximately 20 kg. Excavated soil is not suitable for backfilling the cellar.

4. 3. Standard Installation

Base Preparation

For installing a Quick cellar under standard foundation conditions (with groundwater level below the foundation base), follow these steps:

1. **Excavate the Pit:**
   Dig a pit (shored if necessary) to the dimensions per the installation diagram, but at least 200 mm wider than the cellar itself.
2. **Create the Gravel Bed:**
   At the bottom of the pit, create a compacted and leveled gravel base without overhangs, slopes, etc., at least 100 mm thick.
3. **Unstable Subsoil:**
   In case of unstable subsoil, pour a concrete slab and reinforce it as needed with a welded steel mesh 8×10.
4. **Base Quality:**
   The base under the cellar must always be solid and stable. Sand is not suitable for preparing the base.

Installing the Cellar into the Pit

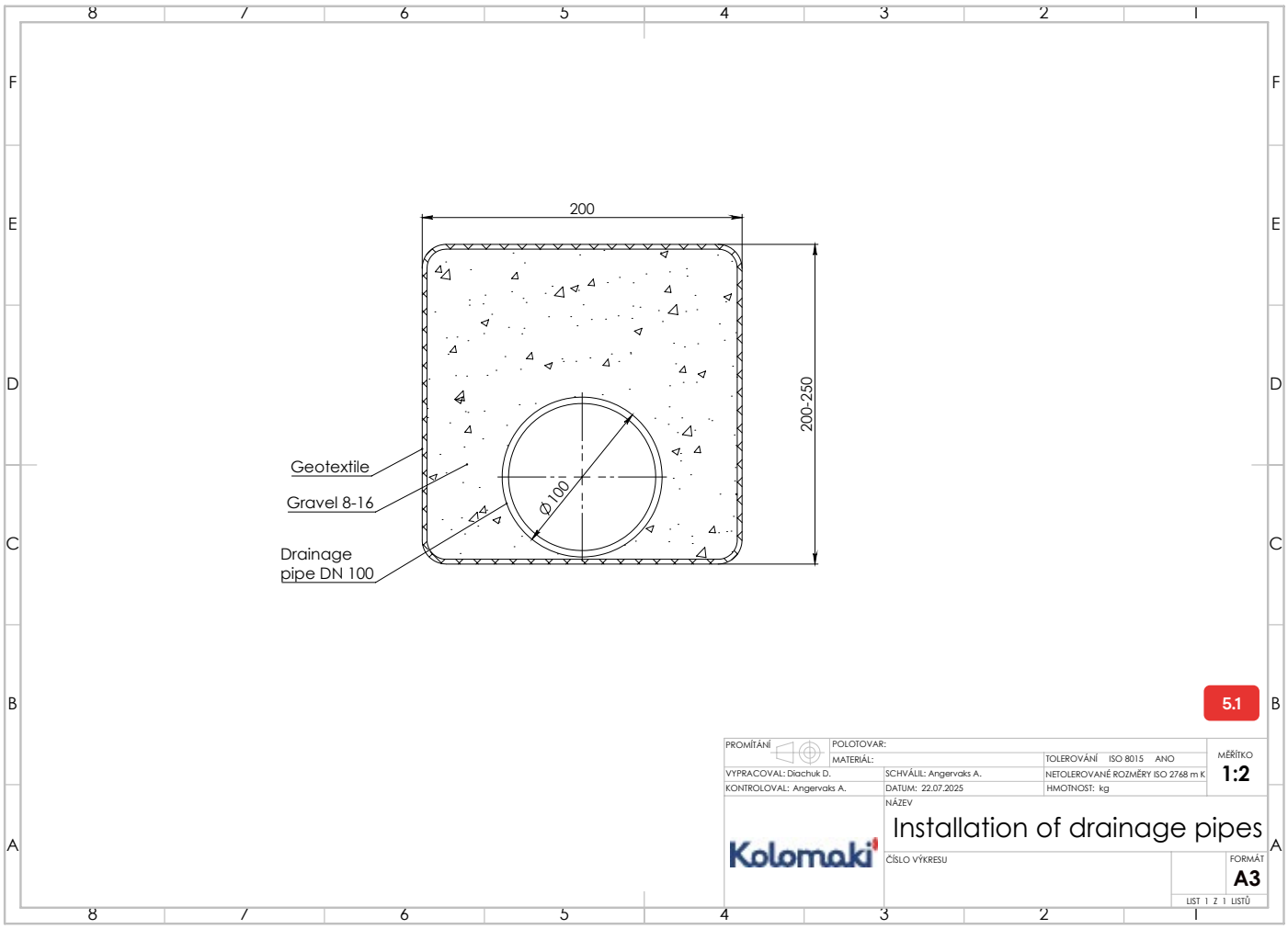
Place the cellar onto the prepared base using suitable equipment (e.g., excavator or crane).
Ensure the base remains clean, free of stones or other irregularities.

Recommended Drainage

- **Installation of Drainage System:**
  After placing the cellar, we recommend installing drainage. Place a drainage pipe (perforated pipe wrapped in geotextile) with a slope into a 50 mm gravel layer.
- **Drainage Connection:**
  Connect the pipe to a soakaway unit, retention tank, drainage system, or to a DN 400 drainage shaft (installation of the shaft according to the installation diagram) with holes and geotextile, where a sludge pump may be installed.

Ventilation Connection

- **Ventilation System:**
  Ventilation is made using KG pipe DN 100 with a closing grille.



- **Pipe Connection:**
  Connect the pipe to pre-prepared openings on the front and rear parts of the cellar. Ventilation piping is installed on every main cellar module.
- **Custom Adjustments:**
  The placement and dimensions of the openings can be customized per the customer's request. The cellar structure contains a sealed grommet into which an elbow and pipe are inserted.

Gravel Backfilling

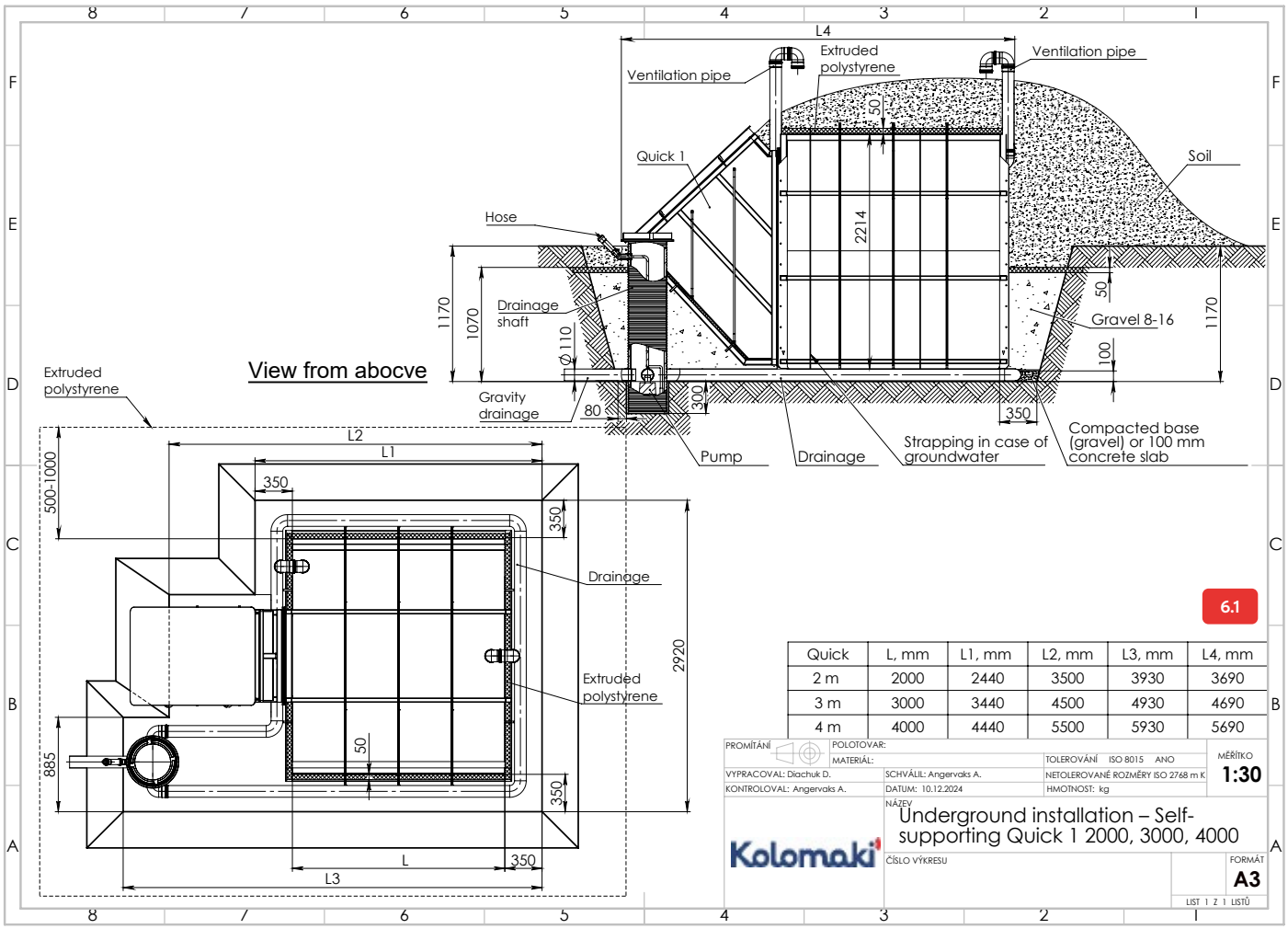
After placing the cellar and connecting the ventilation (and optionally drainage), backfill the cellar with gravel according to the installation diagram.Layer the gravel so the cellar is firmly anchored in the excavation and immobile.

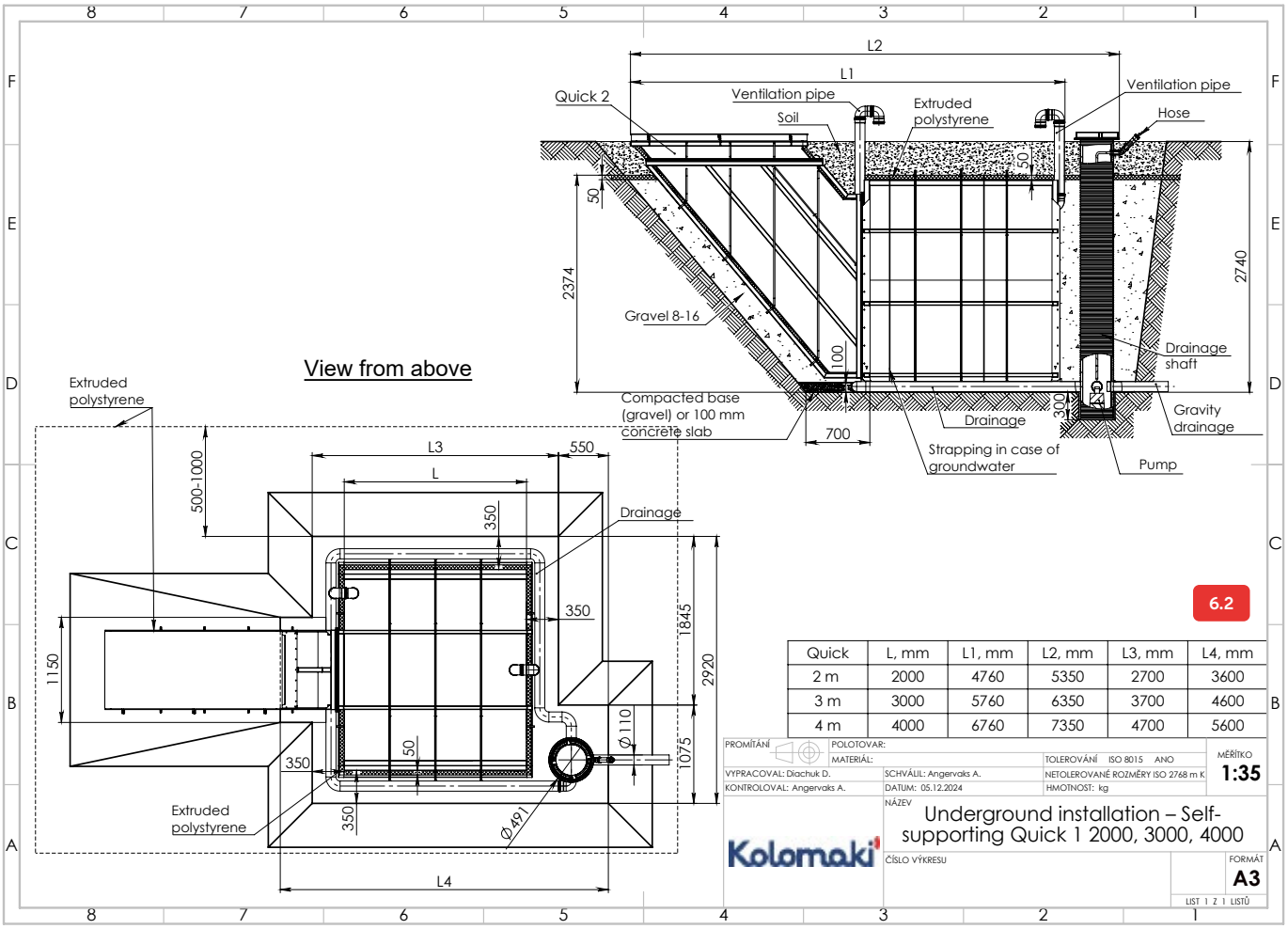
Application of Insulation

- **Applying the Insulation Layer:**
  Apply a layer of extruded polystyrene 50–100 mm thick on the top of the cellar (according to the installation diagram).
- **Function of the Insulation:**
  The insulation layer separates and insulates the topsoil from the cellar. This prevents internal cellar temperature from being affected by extreme external temperatures (heat in summer, cold in winter).
- **Insulation Coverage:**
  The insulation layer should extend beyond the cellar by 500–1000 mm (see installation diagram).

Completion of Installation

After backfilling, cover the cellar with soil from the excavation. This adds an additional insulating layer and ensures the aesthetic integration of the cellar into the surrounding terrain.

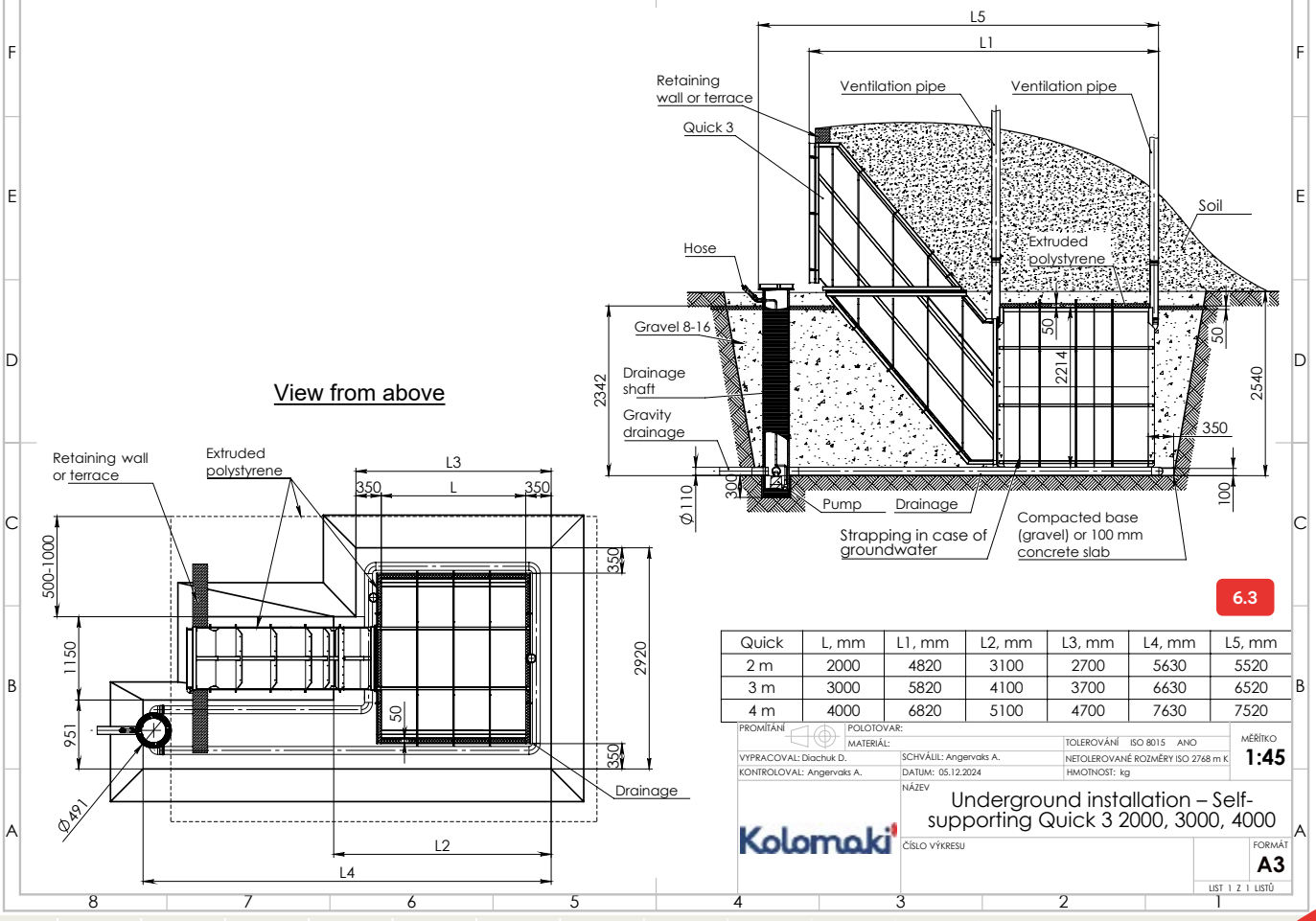




6.2

Quick	L, mm	L1, mm	L2, mm	L3, mm	L4, mm
2 m	2000	4760	5350	2700	3600
3 m	3000	5760	6350	3700	4600
4 m	4000	6760	7350	4700	5600

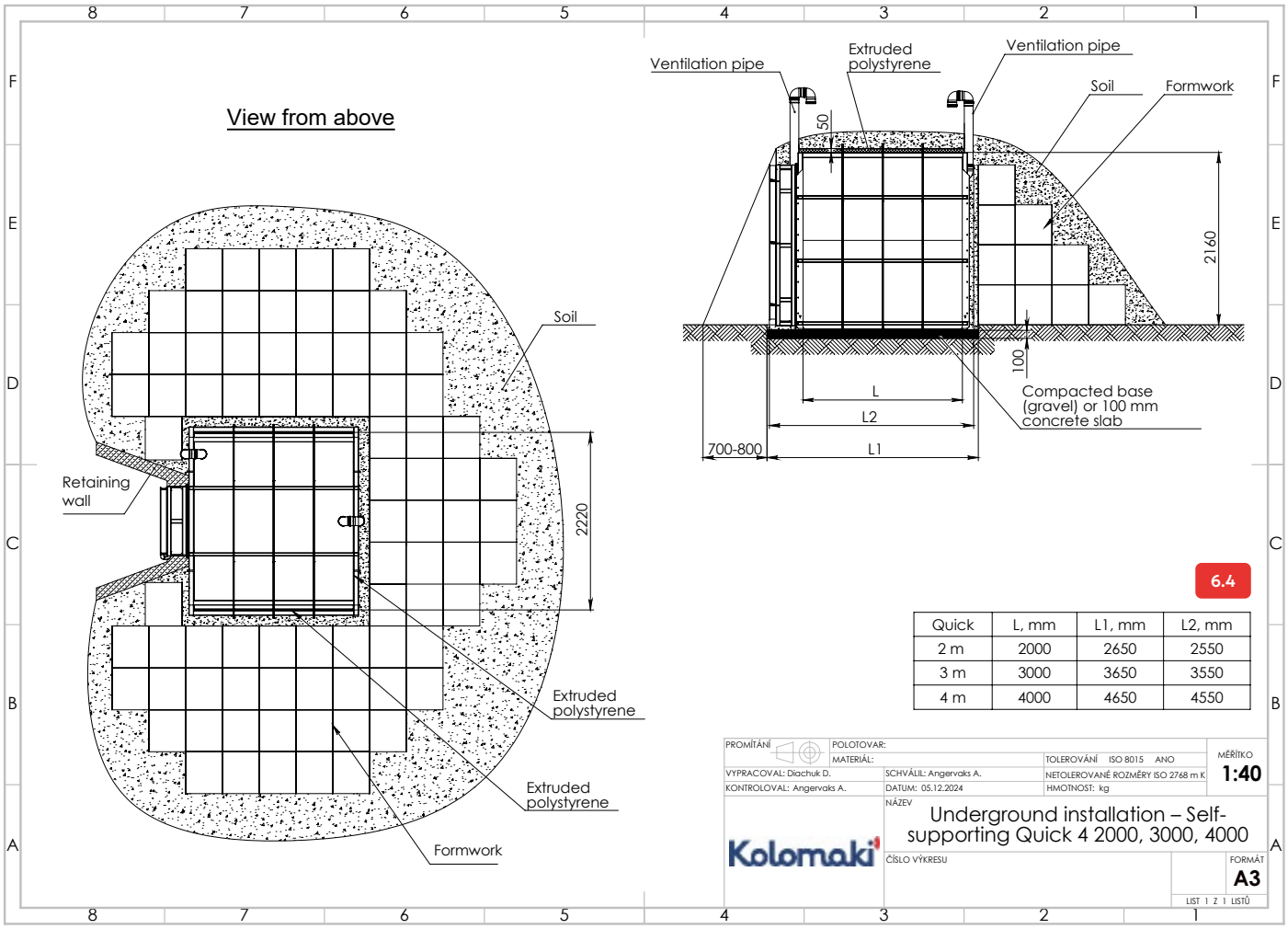
PROMÍTÁNÍ | POLOTOVAR: | MATERIÁL: | TOLEROVÁNÍ ISO 8015 ANO | MĚŘÍTKO 1:35
VYPRACOVAL: Diachuk D. | SCHVÁLIL: Angervaks A. | NETOLEROVANÉ ROZMĚRY ISO 2768 m K
KONTROLOVAL: Angervaks A. | DATUM: 05.12.2024 | HMOTNOST: kg
NÁZEV: Underground installation – Self-supporting Quick 1 2000, 3000, 4000
Kolomaki | ČÍSLO VÝKRESU | FORMÁT A3 | LIST 1 Z 1 LISTŮ



6.3

Quick	L, mm	L1, mm	L2, mm	L3, mm	L4, mm	L5, mm
2 m	2000	4820	3100	2700	5630	5520
3 m	3000	5820	4100	3700	6630	6520
4 m	4000	6820	5100	4700	7630	7520

PROMÍTÁNÍ | POLOTOVAR: | MATERIÁL: | TOLEROVÁNÍ ISO 8015 ANO | MĚŘÍTKO 1:45
VYPRACOVAL: Diachuk D. | SCHVÁLIL: Angervaks A. | NETOLEROVANÉ ROZMĚRY ISO 2768 m K
KONTROLOVAL: Angervaks A. | DATUM: 05.12.2024 | HMOTNOST: kg
NÁZEV: Underground installation – Self-supporting Quick 3 2000, 3000, 4000
Kolomaki | ČÍSLO VÝKRESU | FORMÁT A3 | LIST 1 Z 1 LISTŮ



4. 4. Non-Standard Installation Situations

All non-standard installation situations must be assessed by a structural engineer or project designer to eliminate possible damage or hazards.
A structural report must be additionally provided, prepared by a duly qualified authorized person.

4. 4. 1. Installation in Elevated Groundwater Level

Please note that excessively high groundwater pressure can lead to deformation and damage to the cellar structure.
Minor deformation of the plastic structure, such as slight bulging, is not critical.
More significant deformation or buckling can cause serious damage. For this reason, we recommend:

- Installing a cellar model that does not require deep embedding (such as Quick 1 and Quick 4).
- Carefully selecting a suitable installation location, ideally without the presence of groundwater.
- Ensuring drainage through a drainage system.

Follow the instructions below to minimize risks associated with groundwater pressure and to ensure long-term stability of the structure.

Occasionally Elevated Groundwater Level:

If groundwater level rises only occasionally, the self-supporting cellar can be installed under the following conditions:

1. **Preparation of Concrete Slab:**
   Instead of a gravel bed, pour a reinforced concrete slab on the pit bottom with a rebar mesh 100 mm thick, with dimensions at least 500 mm wider than the cellar. Allow the slab to cure, then place the cellar on top, ensuring that the base is level and free of sharp objects that might damage the cellar.
2. **Anchoring the Cellar to the Slab:**
   Strap the cellar to the concrete slab using polypropylene straps, fastening the ends to the concrete slab to ensure cellar stability even during temporary groundwater rise.
3. **Completing the Installation:**
   After anchoring, continue with the rest of the steps from 4.3 Standard Installation, including drainage installation (without drainage or concrete encasement, slight temporary deformation of the arched structure may occur due to increased pressure), ventilation connection, insulation application, and backfilling with soil.

If Groundwater is Present Year-Round:
The cellar must be encased in concrete. Proceed as follows:

Base Preparation

- Excavate the pit (shore if needed) to the dimensions per the installation diagram, but at least 350 mm wider than the cellar.
- At the bottom of the pit, create a compacted concrete slab at least 100 mm thick and reinforce it with 8×10 welded steel mesh.

Installing the Cellar in the Excavation

Place the cellar on the prepared slab using appropriate equipment (e.g. excavator or crane).
Ensure the slab remains clean, free of stones or other irregularities.

Recommended Drainage
(see diagram 6.1)

- After placing the cellar, install drainage. Place perforated pipe wrapped in geotextile with a slope onto the base slab.
- Connect the pipe to a soakaway system, retention tank, drainage system, or to a DN 400 drainage shaft with holes and geotextile, which may house a sludge pump.

Ventilation Connection

- Ventilation is made using KG pipe DN 100 with a closing grille.
- Connect the pipe to pre-prepared openings on the front and rear parts of the cellar. One ventilation pipe is installed per each main module.
- The position and dimensions of the openings may be adjusted per customer request. The cellar structure contains a grommet with sealing into which the elbow and pipe are inserted.

Concrete Encasement of the Cellar

- After placing the cellar and connecting ventilation (and optionally drainage), formwork should be installed 150 mm from the cellar walls.
- Fill the space between the formwork and the cellar with C20/C25 grade concrete as per the installation diagram. Pour in stages; do not exceed 100 cm of concrete height per day.

Backfilling the Cellar

After completing the concrete work, fill the space between the concrete and soil with gravel. For this, use aggregate of 8/16 mm fraction.

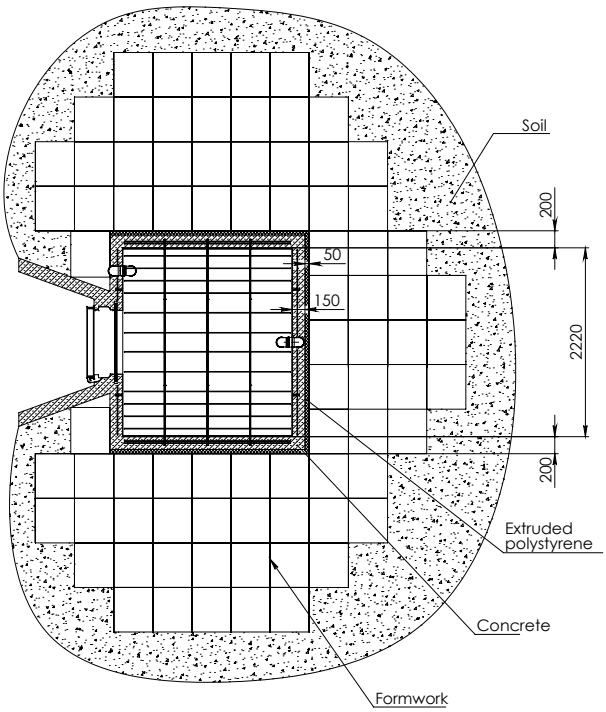
Application of Insulation

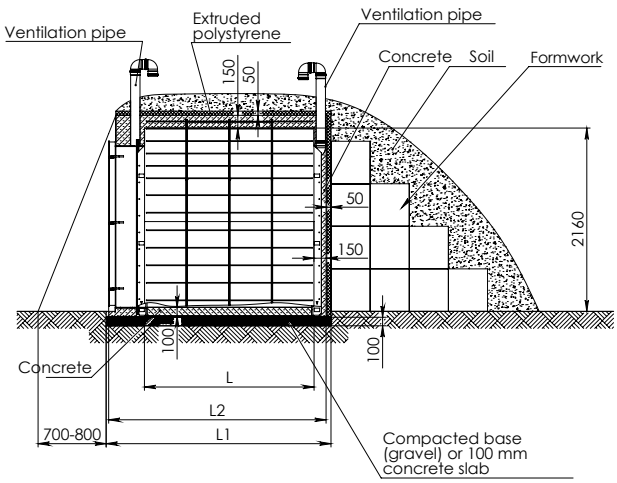
- On the top of the cellar (per the installation diagram), apply extruded polystyrene insulation 50–100 mm thick.
- The insulation layer separates and insulates the topsoil from the cellar. It prevents internal temperature from being affected by extreme external temperatures.
- The insulation should extend 500–1000 mm beyond the cellar (see installation diagram).

Finishing the Installation

After backfilling, cover the cellar with soil from the excavation. This provides an additional insulating layer and integrates the cellar aesthetically into the terrain.

View from above





Quick	L, mm	L1, mm	L2, mm
2 m	2000	2650	2550
3 m	3000	3650	3550
4 m	4000	4650	4550

7.1

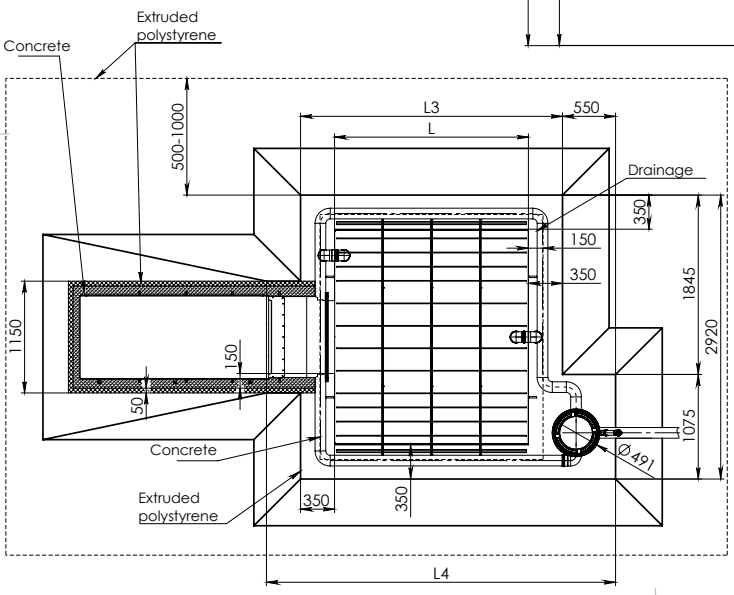
PROMÍTÁNÍ | POLOTOVAR: | MATERIÁL: | TOLEROVÁNÍ ISO 8015 ANO | MĚŘÍTKO 1:40
VYPRACOVAL: Diachuk D. | SCHVÁLIL: Angervaks A. | NETOLEROVANÉ ROZMĚRY ISO 2768 m K
KONTROLOVAL: Angervaks A. | DATUM: 05.12.2024 | HMOTNOST: kg

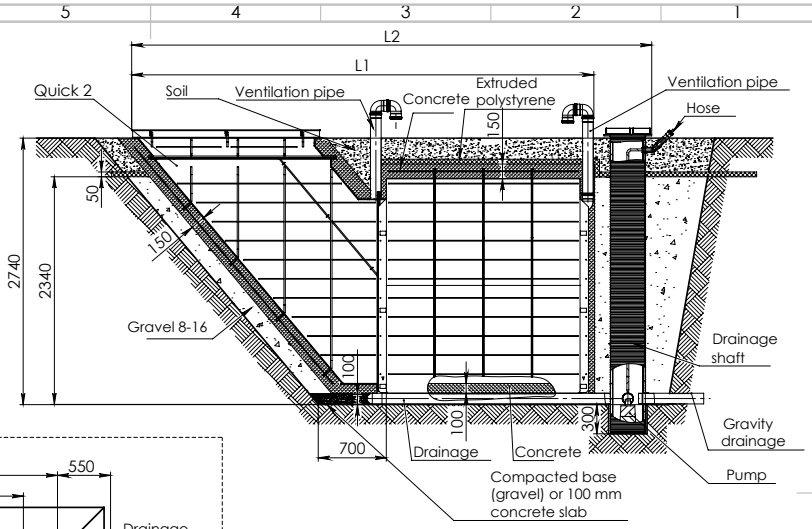
Kolomaki

Underground installation – Quick 4
2000, 3000, 4000 for concreting

ČÍSLO VÝKRESU | FORMÁT A3 | LIST 1 Z 1 LISTŮ

View from above





7.2

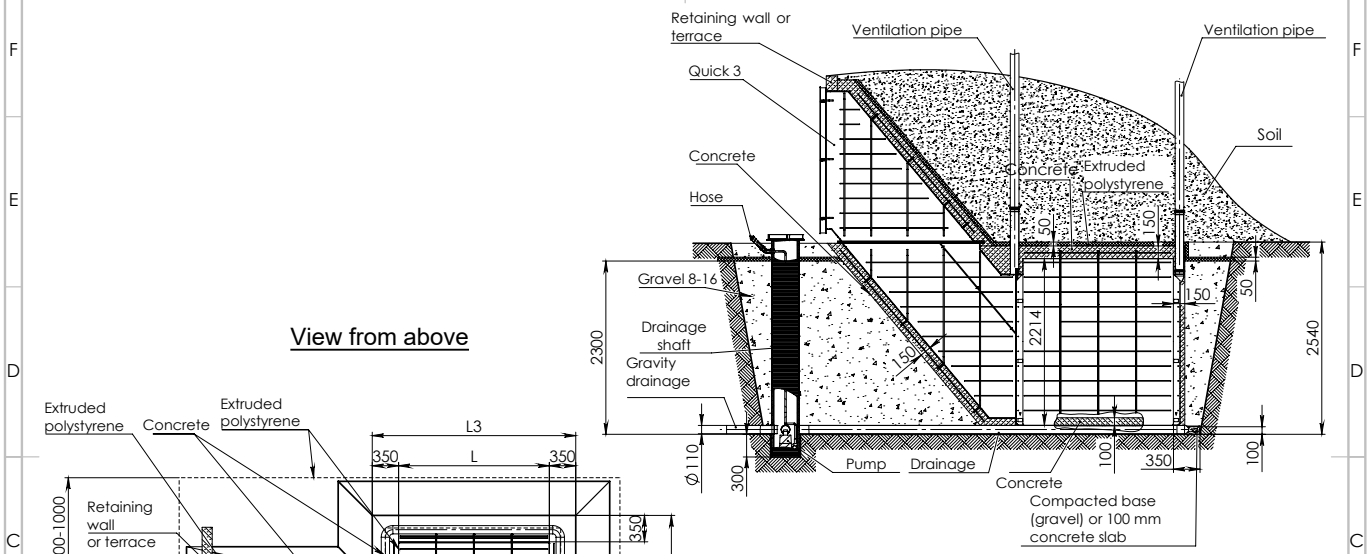
Quick	L, mm	L1, mm	L2, mm	L3, mm	L4, mm
2 m	2000	4760	5350	2700	3590
3 m	3000	5760	6350	3700	4590
4 m	4000	6760	7350	4700	5590

PROMÍTÁNÍ | POLOTOVAR: | MATERIÁL: | TOLEROVÁNÍ ISO 8015 ANO | MĚŘÍTKO 1:35
VYPRACOVAL: Diachuk D. | SCHVÁLIL: Angervaks A. | NETOLEROVANÉ ROZMĚRY ISO 2768 m K
KONTROLOVAL: Angervaks A. | DATUM: 05.12.2024 | HMOTNOST: kg

Kolomaki

Underground installation – Quick 2
2000, 3000, 4000 for concreting

ČÍSLO VÝKRESU | FORMÁT A3 | LIST 1 Z 1 LISTŮ



7.3

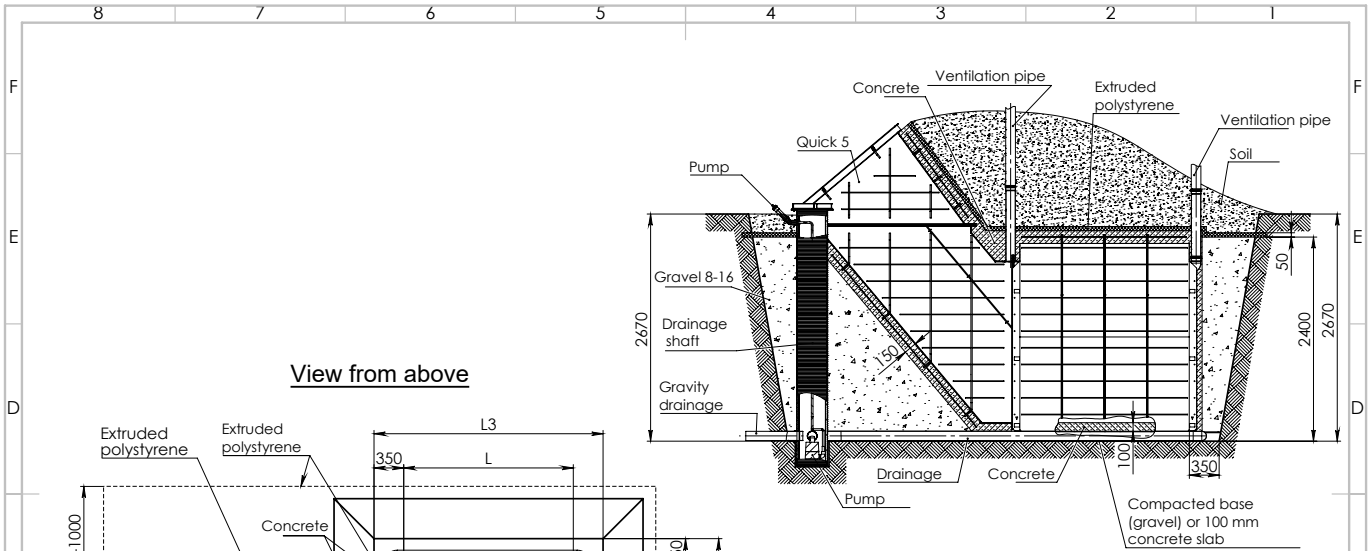
Quick	L, mm	L1, mm	L2, mm	L3, mm	L4, mm	L5, mm
2 m	2000	4820	3100	2700	5630	5520
3 m	3000	5820	4100	3700	6630	6520
4 m	4000	6820	5100	4700	7630	7520

PROMÍTÁNÍ | POLOTOVAR: | MATERIÁL: | TOLEROVÁNÍ ISO 8015 ANO | MĚŘÍTKO 1:45
VYPRACOVAL: Diachuk D. | SCHVÁLIL: Angervaks A. | NETOLEROVANÉ ROZMĚRY ISO 2768 m K
KONTROLOVAL: Angervaks A. | DATUM: 05.12.2024 | HMOTNOST: kg

Kolomaki

Underground installation – Quick 3
2000, 3000, 4000 for concreting

ČÍSLO VÝKRESU | FORMÁT A3 | LIST 1 Z 1 LISTŮ



7.4

Quick	L, mm	L1, mm	L2, mm	L3, mm	L4, mm
2 m	2000	4800	3100	2700	5060
3 m	3000	5800	4100	3700	6060
4 m	4000	6800	5100	4700	7060

PROMÍTÁNÍ | POLOTOVAR: | MATERIÁL: | TOLEROVÁNÍ ISO 8015 ANO | MĚŘÍTKO 1:40
VYPRACOVAL: Diachuk D. | SCHVÁLIL: Angervaks A. | NETOLEROVANÉ ROZMĚRY ISO 2768 m K
KONTROLOVAL: Angervaks A. | DATUM: 05.12.2024 | HMOTNOST: kg

Kolomaki

Underground installation – Quick 5
2000, 3000, 4000 for concreting

ČÍSLO VÝKRESU | FORMÁT A3 | LIST 1 Z 1 LISTŮ

4. 4. 2. Installation Above Ground or on a Slope

(see diagram 6.4)

When installing the Quick cellar above ground level or on a slope, proceed as follows:

1. **Preparation of Gravel Bed**
   Prepare a standard gravel bed at the location of cellar placement according to the instructions in section 4.3 Standard Installation. Place the cellar onto this bed.
2. **Retaining Wall**
   On each side of the cellar that will not be covered with soil, build a retaining wall using lost formwork (permanent shuttering), spaced 400 mm from the cellar walls. This wall ensures lateral stability and protection against soil slippage.
3. **Insulation Around the Cellar**
   Apply a layer of extruded polystyrene insulation, 50–100 mm thick, along the entire height of the cellar from bottom to top. The insulation helps maintain temperature stability and protects the cellar from external conditions.
4. **Installation of Ventilation**
   Prepare the ventilation system according to the instructions in section 4.3 Standard Installation. Properly installed ventilation ensures air circulation and prevents moisture buildup inside the cellar.
5. **Backfilling Gaps with Soil**
   Fill the gaps between the cellar and the retaining wall or lost formwork with soil. Backfilling must be done carefully to prevent movement of the structuresand to ensure the cellar remains stable.

4. 4. 3. Modular Cellar Installation

The installation procedure for a modular Quick cellar is almost identical to the standard cellar installation process. To facilitate handling of multiple modules at once and improve access to modular joints during installation, it is recommended to prepare the excavation 100 mm wider.

Preparation of the Base

Place the individual modules successively on the prepared gravel bed. The bed must be level under the entire cellar footprint to avoid gaps between the modules and the base.

Preparing the Seals

- Apply double-sided adhesive tape to one side of the connecting module.
- Attach the sealing strip to the adhesive tape, aligning it with the pre-drilled holes for sealing and on the modular joint.
- The sealing is essential for modular connections, as it prevents water ingress into the cellar.

Connecting the Modules

- Using lifting equipment, bring the second module precisely into contact with the first.
- For easier handling and accurate alignment, the base under the modules must be level.

Bolting the Modules Together

- After aligning both modules, connect the pre-drilled holes using bolts and nuts.
- A total of 115 bolts with nuts are required.
- We recommend using an impact wrench for this work.

Welding the Joints

- Welding Recommendation: If possible, we recommend welding the joint on both the outside and inside, or at least from the inside, using an extruder.
- Welding in the Excavation: When welding inside the excavation, only three accessible sides of the modular joint can be welded.
- Benefits of Welding: This additional work reinforces the cellar joints and increases the overall structural durability.

Connecting Modules Outside the Excavation

If equipment with sufficient lifting capacity is available on-site to lift the fully assembled modular cellar, the modules can be connected next to the excavation. This method simplifies the work process and makes installation more efficient. Complete the installation following the steps in: 4.3 Standard Installation or 4. 4. 1 Installation in Elevated Groundwater Level.

Welding Price

- Individual Quotation: The price for welding modules by the Kolomaki team is quoted individually based on location and the number of modules.
- Welding Abroad: For welding outside the country, the price includes transportation, accommodation, and labor costs for our team.

5. Additional Information

5. 1. Technical Recommendations

Quick cellars do not require regular maintenance. However, we recommend keeping the cellar clean and not leaving it in a contaminated state. Possible causes of issues and methods for resolving them are listed below:

Temperature Above or Below Optimal Value

- **Excessive inflow of warm/cold air:**
  Limit airflow; adjust the flap on the intake pipe. The exhaust must be fully open.
- **Insufficient thermal insulation or thin soil cover above the cellar, absence of grass/lawn:**
  Add more soil and cover it with turf. Decorative elements such as a garden gazebo are also recommended.
- **Ventilation pipe outlets located inside a building above the cellar:**
  Reroute the ventilation ducts to the outside.
- **Sun heating the entry section:**
  Install protection against direct sunlight.

Formation of Condensation

- **Excess inflow of warmer air compared to the cellar interior:**
  Gradually limit airflow. Remove moisture. Exhaust must be fully open.
- **Storing un-dried vegetables and fruit:**
  Pre-dry fruit and vegetables before storage.

Squeaky Hinges on Entry Cover

- **Contamination or lack of lubricant:**
  Lubricate the hinges with silicone spray once a year.

Internal Insulation Doors Not Closing

- **Warping of the door holding mechanism:**
  Adjust the door position using the screws.

Minor Deformation of Arched Structure

- **Increased underground pressure due to groundwater:**
  Wait for the groundwater level to decrease.

5. 2. Service

Kolomaki, s.r.o. does not perform installation of the products.Installation work is carried out by professional organizations or the customers themselves, who are responsible for correct installation.

However, Kolomaki offers additional service options, such as repair or upgrades of cellars, based on prior agreement. In the case of warranty repair, the manufacturer covers the cost of the work. The costs of transport and other related expenses within the warranty service are borne by the distributor who supplied the cellar to the customer.

For other service work not covered by warranty, costs are borne by the requester—either the customer or the installation organization. The price for these services, including labor, materials, transport, and potential accommodation in remote locations or for foreign installations, is determined individually.

5. 3. Other Information

Product manufacturing takes 2 weeks.
Shipping or pickup is arranged individually after ordering.

5. 4. Warranty Certificate

Serial number of product:	Manufactured on:
	date:

Delivered to customer:	
date:	carrier:

Installed on:	
date:	installed by:

Serviced:
date / service type / brief description of defects and repairs:

Warranty for Quick cellars is provided for a period of 2 years, with an extended warranty of 19 years on the basic polypropylene structure. Electrical components are covered by a 6-month warranty.

Always photograph the installation step by step and keep receipts for all purchased materials.

5. 5. Declaration of Conformity

Kolomaki s.r.o.
Head office: Komenského 576, 273 71 Zlonice
Company ID (IČ): 06142974

issues the following

DECLARATION OF CONFORMITY

pursuant to the provisions of Act No. 22/1997 Coll. on technical requirements for products and amendments to certain acts, as amended, and Government Regulation No. 163/2002 Coll., as amended, for the product:

Plastic Underground Cellars of the Quick Model Series
(Item number as per the type label on each cellar)

Manufacturer:

Kolomaki s.r.o., Komenského 576, 273 71 Zlonice, IČ: 06142974

Intended Use:

Storage of fruits, vegetables, wine, foodstuffs, and beverages.

By this declaration, I confirm that the specified product meets the technical requirementsset out in the technical specification and is safe for use in buildings when installation instructions and usage conditions are followed.
The material used is also suitable for storing food, beverages, and other products due to its passive chemical properties and high resistance to environmental effects.

I declare that I have taken steps to ensure compliance of all products placed on the market with technical documentation and technical requirements and that the product complies with the technical specification.

Conformity assessment was carried out in accordance with § 5 of Government Regulation No. 163/2002 Coll., as amended by Government Regulation No. 312/2005 Coll.

Issued in Zlonice on 1 January 2023

Anton Angervaks
Managing Director

6. Manufacturer

Kolomaki, s. r. o.
Komenského 576, 273 71 Zlonice, Czech Republic
www.kolomaki.com
+420777899323
export@kolomaki.com

6. 1. Manufacturer's Responsibility

The manufacturer is responsible for:

1. Overall product quality and adherence to all manufacturing standards
2. Manufacturing execution, weld quality, and production process control
3. Inspection of all input materials from suppliers
4. Ensuring that each product has a serial number and production label for inspection
5. Certification of production through TZUS Prague

The manufacturer is not responsible for:

1. Organization of installation
2. Improper unloading
3. Incorrect installation
4. Unsuitable site selection for the cellar
5. Incorrect installation in the presence of groundwater
6. Use of the cellar for purposes other than specified
7. Improper transportation methods

Important Notice

This manual cannot cover all possible situations that may occur during installation.
Therefore, we recommend paying extra attention to potential circumstances that could lead to damage to the product.

Before beginning installation, carefully consider all factors that might affect the correct execution of the installation and long-term performance of the product.

Following the provided instructions and preparing thoroughlywill minimize the risk of product damage during installation.

Kolomaki

www.kolomaki.com