Uwe Rosenberg

Glass Road

A game for 1-4 players aged 13 and up

Game instructions

Glass and bricks

The Glass Road is a 150-mile long path through the Bavarian Forest near the border to the Czech Republic. It reminds of the great times of glass production. When you travel along the Glass Road today, you can still feel the heat of this handcraft that was omnipresent in many arborous areas in the Early Modern Age.
Glass and bricks were used long before the Middle Ages. Over 7000 years ago, the Egyptians already knew of glass. The Sumerian in the Middle East, on the other hand, are said to have invented and used bricks about 6000 years ago.

The Romans brought glass to Germania. Its use increased in the 13th century and became a regular feature of everyday life in the 16th century.
Back then, glass production required wood. In the form of potash, it was used to lower the melting temperature of quartz sand. The ferrous oxides in the quartz sand were responsible for the unmistakable green color of the so-called Forest glass. Entire tracts of land were deforested for glass – much to the satisfaction of the feudal lords whose lands could thus be improved with infrastructure. Due to the progressing deforestation, Forest glass ceased to exist in the 19th century.
In the Early Modern Age, bricks were usually burned in brickfields that were established near bigger clay deposits. The construction of such brickfields was a long and tedious process: the excavated clay was cut in thin layers so that it would freeze over the winter and the weathering would soften it. Before the softened clay could be shaped into bricks, it had to be kneaded with bare feet. After the brick was molded, an "edger" would straighten the bricks to obtain a smooth surface. These were then stacked in piles of 10,000 or more and filled with burning materials. Old bricks, mud and straw were used to form the outer walls of the kiln which would then burn over several weeks.
In the 19th century, brick making was revolutionized: the invention of the ring oven reduced the amount of fuel needed down to a quarter of what was required before. At that time, at least 50 new brickworks had been built in the Bavarian Forest.

A manifestation of the early brick making industry is the 282 feet high tower of the Saint Nicholas parish church in Zwiesel.

Today, there are no forest glassworks left in the Bavarian Forest, but the Glass Road still leads to a number of locations of former and current glass production. Today, there aren't any brickfields left in the Black Forest. However, there are some brickworks left open, giving evidence of the long history of brick making.

Goal of the game

In **Glass Road**, you will produce glass over four building periods. Aside from glass, you will need to produce bricks and collect wood and clay to build buildings. Only the value of your buildings will determine your final score and whether you will win the game or not. To accomplish this task, you will need the help of a variety of specialists. When choosing your specialists, try to anticipate which ones your opponents will choose to use your own more effectively.

There is a total of 15 different specialists offering their services. They provide goods and Landscape tiles, and build buildings for you.

Components

1 Building board used to organize the buildings
(two-sided)

4 Landscape boards
(displaying the Landscape spaces)

4 Production boards
(displaying the Production wheels)

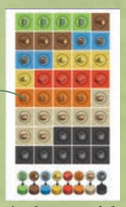
Glass wheel *Brick wheel*

4 sets of 15 Specialist cards
(in player colors)

40 Good tokens *(wooden discs)*, specifically:

4 each of

Glass Wood Water
Quartz sand Brick Clay



1 sheet with stickers for the Good tokens

8 each of

Food Charcoal

51 small Landscape tiles, specifically:

17 each of

Pits Groves Ponds

24 large Forest tiles

93 Building tiles, specifically:

31 each of

Processing buildings Immediate buildings Bonus buildings

1 Start player goblet

as well as 8 plugs and 8 small cardboard rings to assemble the wheels and 12 transparent zip-lock bags to organize the components

Setup

Before your first play

Each of you gets a Landscape and a Production board. Assemble the Production wheels by attaching the dials to your Production boards using the plugs and cardboard rings. Attach the stickers to the wooden discs of matching color.

To assemble the wheels, place a dial and a cardboard ring on a circle of the Production board and attach them with the plugs using a little force. The pieces for the Glassworks wheel are marked green and the pieces for the Brickworks wheel are marked red.

Place the dials such that the numbers are facing up, and the cardboard rings such that the colored side is facing up.

The Production and Landscape boards

Rotate both of your Production wheels so that the **longer pointer points upwards.** Place the depicted components on your boards as indicated on them. *(With fewer than 4 players, remove the leftover boards, Good tokens and Forest tiles from the game.)*

The Production wheel on the top of your Production board represents your **Glassworks**. You start the game with 0 Glass. Place the Quartz sand token in the brown sector 0, the Food token next to it in sector 1, the Charcoal token in sector 2, the Water token in sector 3, and the Wood token in sector 4.

The Production wheel on the bottom represents your **Brickworks**. As depicted, you start the game with 0 Bricks and 0 Charcoal. Place the Clay token in sector 1 on the right and the Food token next to it in sector 2.

Place 6 Forests, 2 Pits, 2 Groves and 2 Ponds as depicted on your Landscape board. Each Forest tile covers two Landscape spaces.

The Building board and the Building tiles

The Building board is two-sided. One side is used in games with 1 to 3 players, the other one is used in games with 4 players. Use the appropriate side of the Building board according to the number of players.

The back sides of the Building tiles display three different symbols *(arrow, hour glass and purse)*.
Sort the Building tiles according to their back sides in separate stacks and shuffle each stack. Take about half of the tiles from each stack and place them face-down to the left of the Building board. You can add more tiles later if needed.

In games with 1 to 3 players, draw **4 Building** tiles from each stack and place them separately on the spaces next to the stacks. Draw **5 Building tiles** per stack in games with 4 players.

In games with 1 to 3 players, there is a total of 12 Building tiles on the Building board.

*Uwe: "For an **introductory game**, we recommend only using the buildings that display a little wayside shrine in (the background of) the top right corner. (You may add the other ones later in the game if needed.) These buildings are easier to understand so you can concentrate on the game mechanics. If you are playing with 4 players for the first time, we also recommend using the side of the Building board for 1 to 3 players to keep the number of different buildings low."*

Each player takes a set of **15 Specialist cards** of one color and puts them into their hand. *(Remove leftover sets of cards from the game.)*
Randomly determine who gets the Start player goblet.

Introduction

Over the course of four building periods, you will build a variety of buildings. You begin the game with three Start buildings that are printed on the left-hand side of your Landscape board *(you can upgrade them later in the game)*. There are three types of Building tiles:

Processing buildings

Immediate buildings with a one-time effect

Bonus buildings that provide bonus points at the end of the game for various accomplishments

Every Building tile is laid out like this:

This is the **name** of the Building tile.

The **building costs** are depicted on the left with symbols for Wood, Glass, Clay and Bricks *(and other goods on some of them)*. The Cooperage costs 1 Wood and 2 Bricks.

Its **point value** is displayed on the right. The Cooperage is worth 3 points at the end of the game.

This is its **ability**.
For example, the Cooperage, a Processing building, allows you to trade 1 Wood for 2 Water.

You need Wood, Glass, Clay and Bricks to build buildings. **Wood and Clay** can be acquired directly with some Specialist cards. To produce **Glass and Bricks**, you will need a series of goods. The **Production wheels** are used to indicate the number of goods you have. The one on the top represents your Glassworks, the one on the bottom represents your Brickworks.

Example for how to use the Production wheel: when gaining 2 Quartz sand, move the Quartz sand token on the Glassworks wheel forward by 2 spaces in clockwise order.

The various goods needed in this game are spread over both Production wheels.

Glass and Wood are located on the Glassworks wheel, Bricks and Clay on the Brickworks wheel. A few buildings require other resources, like Water.

There is a Charcoal and Food token on both Production wheels.

Production

Whenever the **brown sector 0** is **empty** *(as depicted)*, **the Production wheel immediately** has to be rotated in clockwise order. *(However, there is one minor restriction to this, see page 7.)*

The arrows on the pointers remind you of the direction of rotation.

In the previous example, the brown sector 0 became empty after moving the Quartz sand token. Therefore, the Glassworks wheel ***has to*** *be rotated by one sector.*

There are five basic goods on the Glassworks wheel *(and only three on the Brickworks wheel)*. Let us have a look at what happened due to the wheel rotation in the example. Before, we had 2 Quartz sand, 1 Food, 2 Charcoal, 3 Water and 4 Wood. Now, we have one fewer of each of them: 1 Quartz sand, 0 Food, 1 Charcoal, 2 Water and 3 Wood. In exchange, Glass went from 0 to 1. *(The Glass token is on the other side of the pointer where the numbers increase in counter-clockwise order.)* This represents the production process: we produced 1 refined good out of 5 basic goods.

The Specialist cards

Another important aspect of **Glass Road** is its card mechanism. Each player has an identical set of Specialist cards in hand. Every Specialist card provides **two abilities**. At the beginning of each building period, you will choose a hand of **5 Specialist cards**. Then the cards will be played over three card rounds. If you play a Specialist card that **no other player** has left in his hand, you will be able to use **both of its abilities**. However, if at least one other player has that card left in their hand, each of you will only be able to use **one of the two abilities** *(see page 6)*.

Uwe: "This is what this game is about: Choose cards that you think no other player will choose to use them more effectively, but also choose some that you think will be played by other players to benefit from that as well."

Flow of play

Here are the rules for the 3- and 4-player game. *(You can find the rules for the 2-player and Solo game on page 10.)*

The game goes through **four building periods**. Each building period consists of three card rounds. At the beginning of each building period, secretly **choose 5 Specialist cards** out of the 15 that are available. Put these 5 cards into your hand and set the other 10 cards aside, face-down. You may always choose from the **full set of Specialist cards**, regardless of the cards chosen in previous building periods.

Playing a Specialist card

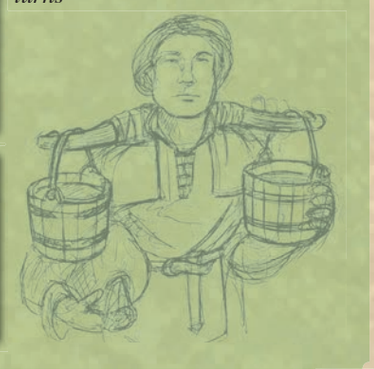
Over the course of three card rounds, each of you will…
- pick **1 card** from your hand,
- and put it **face-down** in front of you;
- then you will **reveal** these cards **one by one** *(i.e. turn them face-up)*
- and resolve them immediately.

Details on the Specialist cards can be found on page 8 and following. For now, let us focus on how they are played.

Whenever you reveal a Specialist card, your opponents must check if they have a copy of that card left in their hands. **If they do, they must play their copy immediately.**

Place the cards that you **must play from hand** in the indentations on the right of your Landscape board. There are only **two** such **indentations**. This means that, per building period, you can only play two cards from hand outside your turn. *(If there is still space for another card in one of the indentations, you **may not** refuse to play a card from hand when forced to. Once both of your indentations are used, you **may not and cannot** play a card from hand outside your turn anymore.)*

The indentations for the cards you have to play on your opponents' turns



The course of a card round

Immediately resolve the card you revealed or played from your hand *(this is explained in greater detail in the next section on page 6)*. The next player must then reveal the card in front of them. Repeat this process until all the picked cards have been revealed. After all of the picked Specialist cards have been revealed and resolved, set the revealed cards aside face-up *(leave the cards you were forced to play in the indentations)* and proceed with another card round by picking a new hand card and placing it face-down in front of you.

The current building period ends after three card rounds.

Important details on the card rounds

- **On all three card rounds, reveal** your face-down cards in clockwise order beginning with the player who has the **Start player goblet** in the current building period.
- **Resolve** the cards in clockwise order as well. The first one to resolve their card is the player who has (placed it face-down and has now) revealed it. Then the players who were forced to play a copy of that card from their hands resolve their copies.
- Quite often, two or more players will pick the same card. When another player reveals a card that you have placed face-down in front of you, you **explicitly may not** reveal *(or resolve)* your card. It stays face-down in front of you until it is your turn to reveal a card. *(See the detailed example on page 6. The difference will be explained in the next section, "Resolving a Specialist card".)*

Further details

- At the end of a building period, some players may have **1 or 2 cards left in their hand** that cannot be played in this building period anymore.
- You can determine which card round you are currently in by counting the face-up cards that you have set aside.

This player has played the Feudal Lord in the first card round and the Clay worker in the second card round. He is about to reveal the card he has picked for the third card round.

Resolving a Specialist card

Each Specialist card has **two abilities**. A description of all the Specialist cards can be found on page 8 and following, and in greater detail in the appendix on page 12 and following.
The cards have a similar layout.

Some of them provide Landscape tiles *(Pits, Groves, or Ponds)*.

Other ones provide goods depending on the number of Landscape tiles you have.

Goods can be used to build buildings.

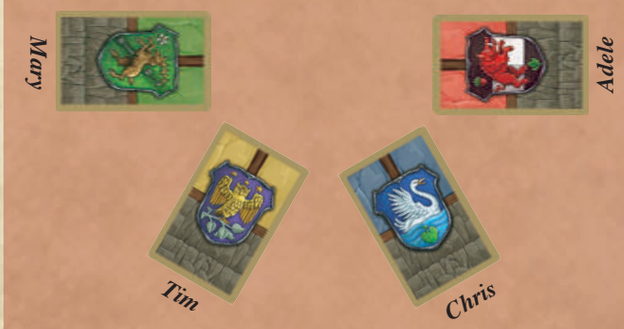
Many Specialist cards have entry fees. Other ones remove Forest tiles from your Landscape board: this makes room for new Building and Landscape tiles.

When resolving a Specialist card, there is an important distinction to make *(see also page 5)*:

- Whenever you are **the only** one to resolve a specific Specialist card, you may use **both abilities** of that card **in any order**. *(You may not, however, choose to use one of the abilities twice.)*

- Whenever you reveal your card and **at least another player** plays a copy of that card from his hand, you and the involved players may only **use one of the two abilities** of that card.

Let's have a closer look on this in the following example.



*All players have secretly placed a card in front of them. Mary and Adele have both picked their **Forest Managers.** Chris left his Forest Manager in his hand and picked another card instead. (Tim, the fourth player, did not choose the Forest Manager for this building period.)*

*Mary is the Start player. She reveals her Forest Manager so Chris **has to** play his Forest Manager from his hand. We assume that Chris has a free indentation left for his Forest Manager. Both of them may only use one of the Forest Manager's abilities.*

After they have both finished resolving their Forest Managers, it is Adele's turn to reveal her card. She also reveals a Forest Manager. After Mary's Forest Manager, no other player can have one in their hand anymore. So Adele is the only one who may use both abilities of the Forest Manager. (Afterwards, Chris and then Tim reveal their cards.)

*Uwe: "This example illustrates how convenient it may be to go **later** in play order: Like Adele in the given example, you will have a higher chance to use both abilities of your card."*

Details

- When you resolve a card that other players have played as well, **you may decide individually** which ability you want to use *(regardless of your opponents' choices)*.
- Each Specialist card ability can only be used once per building period.
- You may **refuse** to use a card ability. You may even play a card and not use it at all. The card is still considered played, though. Therefore, your opponents may still only use one of its two abilities.
- Some Specialist cards have an **entry fee** on their left. You have to pay this fee before using any of its abilities. Even if you may use **both** of its abilities, you **only** have to pay the entry fee **once**. You do not have to pay the entry fee if you play the card without using it at all.

If you were the only one to play the Charcoal burner, you would have to pay 1 wood to get 3+3=6 Charcoal using both abilities. If other players had played it as well, you would have to pay 1 wood to get only 3 Charcoal via either ability.

Uwe: "There are two main advantages to being the only one to play a card:
*• you may use **both abilities** of that card;*
*• you increase the probability that your opponents will have **leftover cards** in their hands at the end of the building period since you did not give them the opportunity to play their cards outside their turn."*

At the end of a building period: Refill the buildings and pass the Start player goblet

A building period ends after three card rounds.

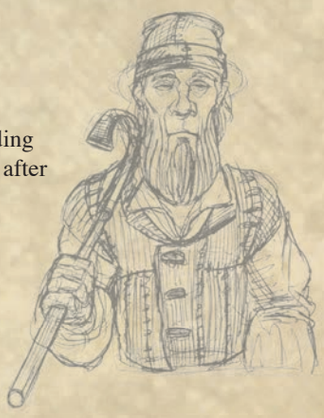
- Refill empty spaces on the Building board with new buildings from the stacks. *(Each row is refilled from the stack to the left of that row.)*
- Pass the Start player goblet to the next player in clockwise order.

*Uwe: "You may notice here how convenient it may be to go **early** in play order: you will be the first to get your hands on the new buildings."*

In the 3-player game only

At the end of the third building period, the Start player goblet has to be passed to the player with the fewest buildings on their Landscape board. In case of a tie, pass the Start player goblet to the next player in clockwise order *(among the tied players)*.

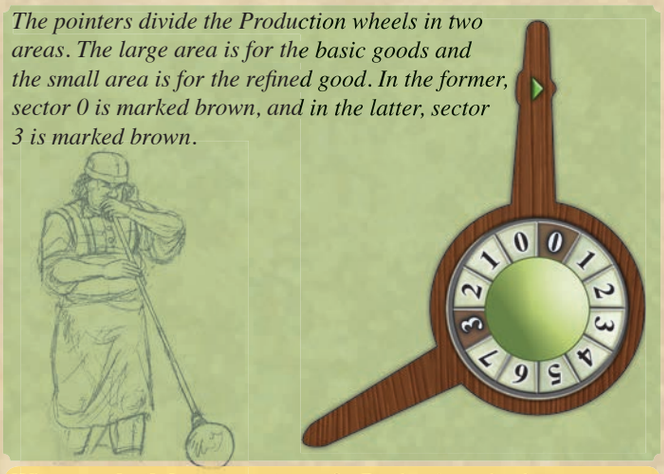
Once the Start player goblet has been passed, another building period begins. The game ends after **four building periods**.



Details on rotating the Production wheels

As mentioned in the Introduction, some Specialist cards may provide goods that are indicated by the Good tokens on your Production wheels. Both wheels have two areas and each of these areas has one brown sector.

The pointers divide the Production wheels in two areas. The large area is for the basic goods and the small area is for the refined good. In the former, sector 0 is marked brown, and in the latter, sector 3 is marked brown.



Whenever **both brown sectors** of a Production wheel are **empty** at the same time, **immediately** rotate that wheel by one sector in clockwise order *(indicated by the arrow)*. Continue to do so as long as both brown sectors are empty. *(This is the restriction mentioned on page 4.)*

Here is a detailed example:

In this example, the Quartz sand token has been moved from sector 0 to sector 2. (The Water token is on 2, Wood on 3, Food and Charcoal are both on 4.) In the smaller area, Glass is on 2. Both brown sectors are empty: as a result, the Production wheel must be rotated.

*After one wheel rotation, the brown sector 0 is **still empty**. However, the other brown sector is not empty anymore since the Glass token was moved from 2 to 3. So the wheel will not be rotated again, for now.*

Details

- Whenever both brown sectors are empty, you **cannot prevent** the wheel from being rotated.
- You **may not** rotate a Production wheel **unless both brown sectors are empty.**
- You **may not** rotate the wheels in the middle of a transaction, e.g. when paying the building costs of a building or gaining goods via an action.
- A wheel might have to be rotated multiple times in a row. This is considered a single process and may not be interrupted by anything else. *(In particular, this "single process" may not be interrupted by anytime-actions, described in the next section.)*

Uwe: "Small tip: Wood and Clay are important building materials. When you run out of them, it may happen that the next Wood or Clay you gain causes a wheel to be rotated, making you lose the gained good as soon as you get it. To prevent this from happening, you may consider leaving Food or Charcoal intentionally on 0 as some sort of 'wheel stopper'."

Anytime-actions

There are actions that may be carried out at any time during the game and do not require a Specialist card. As long as you **finish** every action before starting another one, anytime-actions may literally be carried out at any time *(especially outside your turn)*. Anytime-actions are:

The top row of the Building board displays the Processing buildings. Once you have built such a building, you may do the depicted **trade** *(indicated by the blue ability box)* **at any time during the game** *(even multiple times in a row)*. For instance, you may trade 1 Wood for 2 Water with the Cooperage whenever you like. However, every single trade is considered an action and may cause **wheel rotations**.

You may **remove Landscape tiles** *(i.e. Pits, Groves and Ponds)* from your Landscape board at any time during the game *(but you may not rearrange them)*. You may use the free space for other purposes. In the example below, you might remove the Pond to make room for a new building. *(Forest tiles, on the other hand, can only be removed with the help certain Specialist cards or buildings. Building tiles cannot be removed **at all**.)*

Uwe: "The abilities of the Processing buildings may seem unimpressive at first. Yet they are very important as you can use them over and over again for the remainder of the game. If you take advantage of them, you can really jump-start your game."

The Specialist cards and building

In this section, we will explain the Specialist cards in the context of each other *(more details can be found in the appendix)*. We will also explain how to build buildings. In some places, we will mention two values *(like "2 or 4 Wood")*. In these cases, the first value indicates what you will get for the card when you use one of its abilities, and the second value indicates what you will get if you use both of its abilities *(see the yellow text boxes on page 6)*.

All players have access to the buildings on the Building board. You can play the **Feudal Lord** to get private access to a set of 3 buildings that only you can build (your private offer). When using this ability, draw a Building tile from each stack of buildings and place it face-up in front of you. Its other ability provides 1 Wood and 1 Clay.

You can gain new Landscape tiles by using the **Pit Worker, Forest Manager** or **Pond Builder**. As its first ability, the Pit Worker provides a Pit, the Forest Manager a Grove, and the Pond Builder a Pond. On top of that, you will get 1 Clay with the Pit Worker and 1 Wood with the Forest Manager. Their other ability provides a number of goods equal to the number of Landscape tiles you have of the respective type. You can always choose from two options: the Pit Worker provides Quartz sand or Clay, the Forest Manager Food or Wood, and the Pond Builder Quartz sand or Water.

The **Cultivator** provides a Landscape tile of your choice. His other ability allows you to build a building.

How does building work?

When a Specialist card allows you to build a building, you may build any one of the available buildings on the Building board or one of the buildings from your private offer *(created with the Feudal Lord)* by paying its building costs. Most of the buildings are built with Wood, Glass, Clay or Bricks.

Empty spaces on the Building board will be refilled at the end of the building period.

Building tiles that show a wooden structure on the left, where the building costs are printed, have to be placed on an empty space of your Landscape board when built. Building tiles that show a brick pattern instead are upgrades and have to be placed on top of the indicated Start building. They may not be placed on empty spaces of your Landscape board. *(Upgrading a Start building does not increase your number of buildings.)*

The Forest Hut is an upgrade for the Forest Glassworks, which is located at the top left of your Landscape board. Building tiles like the Sand Island are still considered buildings, even though their name suggests otherwise.

Beside the **Cultivator**, there are three more Specialist cards that you can build buildings with.
As its other ability, the **Supplier** provides you with 2 goods of the same type *(except Glass and Bricks)*, but your opponents will also get 1 good of that type.
The **Builder** provides two building actions but requires 1 Food to build at all.
To use the **Carpenter**, you have to remove 1 Forest tile from your Landscape board. Its other ability provides 1 Wood.

Removing a Forest tile is mainly a good thing. It makes room for new buildings. There are two more Specialist cards beside the Carpenter that remove Forest tiles.

If you remove a Forest tile with the **Slash-and-burn Farmer**, you will get 2 Charcoal and/or 2 Food.
If you do so with the **Woodcutter**, you will get 2 or 4 Wood.

The next five Specialist cards are mainly used to collect goods and they all have entry fees.
The **Clay Worker** requires 1 Water to provide 2 or 4 Clay.
The **Fuel Collector** also requires 1 Water to provide 1 Charcoal per card left in your hand. Its other ability provides 2 Wood.

The **Charcoal Burner** requires 1 Wood to provide 3 or 6 Charcoal.
The **Fish Farmer** requires 1 Charcoal to provide 2 Food and/or 1 Food per Pond you have *("smoked fish")*.
The **Water Carrier** requires 1 Food to provide 2 Water and 1 Wood, and/or 2 Water and 1 Quartz sand.

Uwe: "Make sure to choose enough Specialist cards with building abilities for the final building period. It is quite likely that other players will pull some of them from your hand at a time when you do not have all the building materials you need. This may result in your being unable to acquire the buildings you planned to get."

The Landscape tiles

Pit *Grove* *Pond*

The number of Landscape tiles is supposed to be unlimited. Improvise if you run out.

End of the game and scoring

The game ends after 4 building periods. Then all players may use their Processing buildings any number of times before the scoring begins. During the scoring, add up the values of your buildings. The value of your Bonus buildings depends on their requirements *(see the appendix on page 19)*. For instance, the Start building "Glassmaker's Colony" is worth half a point per Quartz sand. *(Do not round this value.)*

The Glassmaker's Colony is the only building in the game that may have a non-integer value.
In this example, the 3 Quartz sand you have left are worth 1.5 points.

If you upgrade a Start building, you will only get points for the upgrade (but not for the upgraded Start building). In this example, the Forest Glassworks was replaced by the Forest Hut. You will get 2 points for the Forest Hut.

The player with the highest score wins. In case of a tie, there are multiple winners.

*Uwe: "If you like to play longer games, we recommend playing through **five building periods**. Determine the starting player for the fifth building period like in a 3-player game. The player who has the **fewest buildings** on his Landscape board at the end of the fourth building period will be the Start player for the fifth one. (Again, in case of a tie, simply pass the Start player goblet to the next player in clockwise order among the tied players.) In a 3-player game, make sure the Start player of the fourth building period will not be Start player again in the fifth one. (Simply ignore this player when determining the Start player for the final building period.)"*

The 2-player game

Play according to the multiplayer rules but with the following changes.

Do not place hand cards face-down in front of you during a building period. Instead, beginning with the Start player, players take turns to play a card **face-up** from their hand until **one of them** runs out of hand cards. The building period **ends immediately** when this happens. Most often, one player will have some leftover hand cards that they cannot play anymore. However, as in multiplayer games, no player should have more than 2 cards left in hand. If a player has 3 cards left, they may play one of them and use it by themselves.

*Uwe: "The 2-player game is still played like the multiplayer game. If your opponent plays a Specialist card that you have left in hand, **you must play it from your hand**, too. You may not refuse to do so **unless** you have already played two such cards (and placed them in the indentations of your Landscape board). In this case, you **may not** play the card on your opponent's turn. This will not happen too often in a 2-player game."*

The Solo game

Play according to the rules of the 2-player game but with the following changes.
The goal of the solo game is to have as many points as possible at the end of the **7th building period.** *(30 points is considered a remarkable score.)* For each building period, choose a number of Specialist cards as indicated by the following table. Set the other cards aside, face-down.

Building period	1	2	3	4	5	6	7
Number of cards	3	4	5	6	3	4	5

Shuffle the chosen Specialist cards and draw one **randomly**. Play this card using only one of the two abilities on it. Continue to do so until you have only **two cards** left in your hand. Look at these cards and pick one of them. Play this card using both of its abilities and ignore the other card.
At the end of every building period, set the chosen cards aside *(including the unused one)*, face-up and fanned out. You **cannot choose** from these cards in **the following building period.**
Then take the cards that you had not chosen as well as the fanned out cards from the **previous** building period and choose a new set of cards – according to the table on the previous page – for the next building period.

*Example: Your choice for the **first building period** includes the Pit Worker, Cultivator and Water Carrier. You shuffle these cards and draw one of them randomly: the **Pit Worker**. You use one of its abilities. Between the remaining two cards, you decide to play the **Cultivator**. You may use both of its abilities. The **Water Carrier** remains unused. For the **second building period**, you cannot choose the Pit Worker, Cultivator or Water Carrier again since you had to set them aside, fanned out. You will be able to choose from them again in the **third building period**.*

Details

- In the solo game, the first ability of the **Supplier** only provides a **single** basic good of your choice instead of two goods.
- You do not need to keep track of what building period you are in. Just look at the number of fanned out cards. *(This is due to the fact that you will use a different number of cards in consecutive building periods, see table.)* Therefore, you do not need to count the seven building periods.

Credits

About the designer

Uwe Rosenberg was born in 1970 in the East Frisian town of Aurich, where he and Frank Heeren, the publisher of this game, graduated from high school. They met each other for the first time during their advanced Geography classes. During those years, Uwe Rosenberg learned the basics of rural agriculture, which many years later resulted in his most popular games: “Bohnanza” and “Agricola”. Today, games about agriculture and landscaping are one of his hobbies. He lives in Gütersloh, is married and has two children.

Acknowledgements

“Glass Road” was designed by Uwe Rosenberg in December 2012. In the months before that, he developed two similar prototypes – one of them being “Black Forest”, a strongly-themed game set in the Black Forest. “Glass Road” is intended to be the first game in a series of games using Production wheels. The wheel mechanic that is now a typical design element of Rosenberg’s games that was first introduced in games like “Ora et Labora” and “Le Havre – The Inland Port”. The other main mechanic, the card mechanism, is based off an earlier game of Rosenberg’s from 2005, namely “Wir sind schwanger” (and has been fittingly reused in 2008 in a different form by Andreas Pelikan in his game “Witch’s Brew”).
“Glass Road” was edited by Uwe Rosenberg and Frank Heeren. The rule book was written by Uwe Rosenberg, and the realization of the game was in the hands of Frank Heeren. Both of them would like to thank Dennis Lohausen for the beautiful illustration of the game, and Grzegorz Kobiela for the English translation. Uwe wants to thank Grzegorz Kobiela, Mario Weise, Michael Wißner, Julian Steindorfer and Sebastian Wehlmann for proof-reading the rule book. Z-Man Games wishes to thank Bradley Eng-Kohn.
Last but not least, Uwe wants to thank the many playtesters of the three iterations of this game in chronological order. Without their constructive feedback, this game could not have been realized in its current form: Andreas Odendahl, Marinka Voß, Christian Voß, Jörg Terhoeven, Stefan Stadler, Lorenz Merdian, Gabriele Goldschmidt, Lasse Goldschmidt, Ingo Kasprzak, *(10.)* Nils Miehe, Mick Kapik, Hagen Dorgathen, Arabella Leser, Marc Jünger, Dominik Lechner, Tamara Lechner, Andreas Höhne, Verena Wall, Sascha Hendriks, *(20.)* Ingrid Kranicz, Melanie Kranicz, Marcel Jacobsmeier, Paulina Borek, Susanne Rosenberg, Thomas Ludwig, Erwin Amann, Barbara Schmitz, Arne Bratenstein, Alexandra Ryszczuk, *(30.)* Michael Nollek, Marian Wall, Sebastian Rapp, Frank Heeren, Dirk Krause, Mike Neunert, Henning Förthmann, Falko Heise, Torsten Buhck, Karsten Höser, *(40.)* Lutz Dickner, Stefanie Hoja, Timo Hoja, Carola Krause, Sonja Gelhaus, Bernd Nickella, Martin Ache, Jan Bahlmann, Marco Schütte, Julia Inderliet, *(50.)* Marco Althoff, Sebastian Wehlmann, Sebastian Hein, Ralph Bruhn, Tanja Muck, Peter Muck, Klemens Franz, Ioanna Giannaki, Dominik Grottian, Inga Blecher, *(60.)* Verena Jacob, Carolin Knauber, Frederik Häfker, Kristian Näschen, Daniel Reetz, Jochen Schwinghammer, Christoph Weisshaupt, Michael Heißing, Tobias Kriener, Tabea Luka, *(70.)* Jenni Jünger, Suse Dahn, Thalea Westkämper, Jürgen Kudritzky, Arne Hoffmann, Petra Böhm, Yvonne Lüscher mit Ihno Kelsch, Dieter Alber, Marcel Schwarz, Silke Nikodemus, *(80.)* Patrick Enger, Sascha Strzoda, Birgit Baer, Bigga Rodeck, Markus Dichtl, Jessica Jordan, Timo Loist, Janina Kleinemenke, Nicole Reiske, Carsten Hübner, *(90.)* Frank Chlapek, Norbert Dietz, Holger Herrmann, Thomas Mechtersheimer, Iris Schimpf, Kerstin Schwerdtner, Jörg Schwerdtner, Alex Niessen, Franziska Molter, Regina Molter, *(100.)* Andreas Molter, Isabel Ribes Tang, Javier Ribes, Frank Reinicke, Clara Hoppe, Karin Hoppe, Peter Berger, Florian Mersbach, Oliver Köpp, Frauke Müller, *(110.)* Daniela Reißing, Hansbernd Eigemann, Joachim Schabrowski, Christian Becker, Jürgen Aden, Koon Robben, Dominik Riege, Ariane Domesle, Robert Stolemann, Georg von der Brüggen, *(120.)* Thomas Kempkens, Wanja Heeren, Christine Heeren, Dirk Schmitz, Carsten Stürmer, Nicole Griesenbrock, Marion Weirather, Bernd Boland, André Kretzschmar, Sascha Sucker, *(130.)* Mechthild Kanz, Frank Bergfried, Reinhold Kanz, Peter Weyers, Lara Krause, Nathalie Herrmann, Ulf Reintges, Stephanie Barth, Christiane Terveen, Uwe Grabowski, *(140.)* Michael Stadler, Sonja Brangewitz, Tobias Recker, Dominik Mechnig, Thekla Goldberg, Michael Düpont, Philipp Georg, Frank Goldberg, Marvin Hehn, Torben Hollin, *(150.)* Agnieszka Kobiela, Grzegorz Kobiela, Jens Drögemüller, Helge Ostertag, Christof Tisch, Barbara Kiesler, Tom Heumann, Stephan Rink, Sören Paukstädt, Stefan Wahoff, *(160.)* Bianca Batsch, Hans Pöter, Ronny Vorbrodt, Rolf Raupach, Frank Lamprecht, Olaf Schulze, Andreas Leuschner, Nicolas Schäfer, Stefan Honigfort, Eric Humrich, *(170.)* Tanja Briefs, Philipp Nelles, Conny Richter, Thomas Cavet, William Attia, Bernadette Beckert, Nicole Strauch, Andreas Buhlmann, Mario Weise, Dirk Schröder, *(180.)* Bianca Schürmann, Nicole Schmied, Thomas Rosanski, Oliver Krick, Volker Geilhausen, Tobias Hartwig, Thomas Hartwig, Charly Petri, Christopher Lohrs, Thomas Berg, *(190.)* Claudia Hast, Ralf Partenheimer, Uwe Holtappel, Carmela di Rienzo, Jörg Einsfeld, Thomas König, Jörg Schulte, Torben Edelhoff, Felix Remer, Malte Schierholz, *(200.)* Leif Erichsen, Horst Meeder, Kai Mölleken, Bodo Drews, Timo Schreiter, Tommy Braun, Thomas Balcerek, Volker Stadler, Sebastian Stöber, Malte Sommer, *(210.)* Astrid Konzen, Tobias Braun, Christian Neumann, Andreas Thiele, Max Hoffmann, Marc Klerner, Florian Racky, Sebastian Wenzel, Daniel Rohde, Christian Henkel.

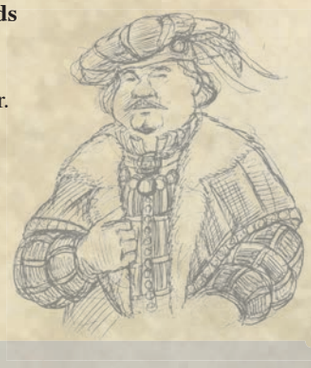
Appendix

The appendix consists of two sections: a list of all Specialist cards and a Building tile index.

Appendix 1: The Specialist cards

This is a detailed list of the **15 Specialist cards** and their abilities. There are some general rules regarding **basic goods** and how they are indicated on the Production wheels:

- When gaining basic goods, move the corresponding token in clockwise order.
- When paying basic goods, move the corresponding token in counter-clockwise order.
- You cannot move a basic good past sector 7.



Reminder:

- *Glass and Bricks are* **not** *considered basic goods.*
- *You may remove Landscape tiles (Pits, Groves, Ponds) at any time from your Landscape board (but you may not remove Forest or Building tiles).*
- *When you are allowed to use both abilities of a Specialist card, you may use them in any order.*

General rules for all Specialist cards:

(P1) When gaining goods, you may take fewer goods than provided.

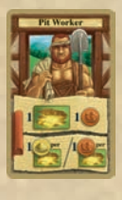
(P2) When gaining Food or Charcoal, you have to indicate the gain **on one Production wheel or the other**, your choice. You cannot split the gain between the wheels.

(P3) When paying 1 Food or 1 Charcoal (entry fees), you may use **either Production wheel** to indicate the payment.

Feudal Lord

There are three stacks of Building tiles. Draw a Building tile from each stack and place it face-up in front of you. When building, you may build one of these instead of a building from the Building board. *(There is no limit to the number of buildings you may have in your private offer.)*

Move the **Wood token** on the Glassworks wheel 1 space forward. Additionally, move the **Clay token** on the Brickworks wheel 1 space forward.



Pit Worker

Place a Pit tile on an empty space of your Landscape board and move the **Clay token** on the Brickworks wheel 1 space forward.

Move the **Quartz sand token** on your Glassworks wheel, or the **Clay token** on the Brickworks wheel forward by a number of spaces equal to the number of **Pits** you have.

Forest Manager

Place a Grove tile on an empty space of your Landscape board and move the **Wood token** on the Glassworks wheel 1 space forward.

Move the **Food token** on your Glassworks or Brickworks wheel forward by a number of spaces equal to the number of **Groves** you have *(see P2)*. Alternatively, move the **Wood token** on your Glassworks wheel forward by that number.

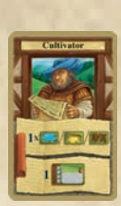
Example: If you are the only player to play the Forest Manager, you may first gain a new Grove tile and place it on an empty space of your Landscape board. Then choose Wood or Food, determine your total number of Groves and gain that number of Wood or Food according to your choice. Thus, the newly gained Grove has already paid back.

Pond Builder

Place a Pond tile on an empty space of your Landscape board.

Move the **Quartz sand** or the **Water token** on your Glassworks wheel forward by a number of spaces equal to the number of **Ponds** you have.

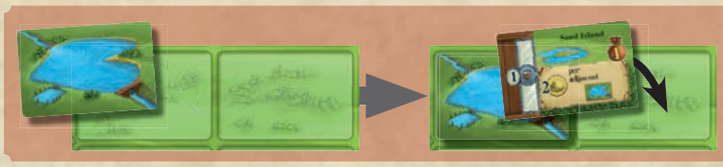
There are four Specialist cards which you can use to build buildings with.



Cultivator

Place a Pit, Grove, or Pond tile on an empty space of your Landscape board.

Pay the building costs of a building* on the Building board and place it on an empty space of your Landscape board. Alternatively, build one of the buildings from your private offer *(see Feudal Lord)*.



Example: If you are the only player to play the Cultivator, you may first gain a new Pond tile and place it on an empty space next to another empty space of your Landscape board. If you then build the Sand island on that other space, you will gain 2 Quartz sand.

Supplier

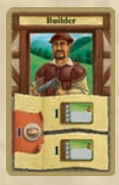
Choose one of the following types of goods: Charcoal, Food, Wood, Quartz sand, Water or Clay. You get **2 goods** of the chosen type *(mind P2 on page 12)*. Then each of your opponents also gets 1 good of that type.
In the solo game, you only get 1 good instead of 2.

Pay the building costs of a building* on the Building board and place it on an empty space of your Landscape board. Alternatively, build one of the buildings from your private offer *(see Feudal Lord)*.

Details on the Supplier's first ability

- When you choose Charcoal or Food, your opponents may decide individually which Production wheel they use to indicate the gain.
- Your opponents may refuse to gain the good.
- You cannot gain a good on a Production wheel that already has seven units of that good.

Example: Your opponent plays the Supplier to get 2 Wood, but you already have 7 Wood. However, if you have a Processing building that takes Wood as an input, you may use that building before gaining 1 Wood via your opponent's Supplier (see Anytime-actions).



Builder

Pay 1 Food *(see P3)*. If you do not have any Food left or do not want to pay it, you cannot use the Builder. Regardless of that, it is still considered played and will reduce the efficiency of your opponents' Builders.

Pay the building costs of a building* on the Building board and place it on an empty space of your Landscape board. Alternatively, build one of the buildings from your private offer *(see Feudal Lord)*.

Pay the building costs of a building* on the Building board and place it on an empty space of your Landscape board. Alternatively, build one of the buildings from your private offer *(see Feudal Lord)*.

Note on the Builder
If you carry out both building actions, carry them out separately and one after another. You may have to rotate the Production wheels in-between the two building actions.

Carpenter

Remove a Forest tile** from your Landscape board. If you do not have any Forest tiles left, you cannot use the Carpenter.

Move the **Wood token** on your Glassworks wheel 1 space forward.

Pay the building costs of a building* on the Building board and place it on an empty space of your Landscape board. Alternatively, build one of the buildings from your private offer *(see Feudal Lord)*.

❄ Keep in mind:
- The buildings in the middle row of the Building board have an ability that can only be used once during the game when the building is built.
- There are buildings that have to be placed on top of the Start buildings *(the so-called upgrades)*.

This is how our graphic designer, Dennis, illustrates the buildings using a drawing board and pen.

At first, he surveys the construction site with a grid pattern. *Then he outlines the ground plan. Here, it is for the Water mill.* *In the next step, he colors it.* *Afterwards, he draws the doors, windows and beams.* *Shadows provide depth to the mill.* *Finally, he adds some lights and little details and the illustration is ready!*

In most cases, building a building should not cause any problems. When in doubt, strictly abide by the following rules:

1. Pay 1 Food when playing the **Builder**. Remove a Forest tile when playing the **Carpenter**.
2. Unless you are building an upgrade for a Start building, you need to have at least one empty space on your Landscape board. Remove a Landscape tile *(Pit, Grove, Pond)* if needed.
3. On some rare occasions, you may have to rotate the Production wheels after removing a Landscape tile *(e.g. when you have the Building Firm or the Builder's Hut)*.
4. Now pay the **entire** building costs of the building. Do not rotate any Production wheels while paying.
5. Once you are finished paying the building costs, you may have to rotate the Production wheels. *(This might be the case when you use Glass or Bricks.)*
6. Place the newly acquired building on an empty space of your Landscape board *(unless it is an upgrade for a Start building)*. If it is an upgrade for a Start building, place it on top of the appropriate Start building.
7. If the new building is a Processing building, you may now use it for the first time. If it is an Immediate building, you have to carry out its one-time effect immediately.

Slash-and-burn farmer

Remove a Forest tile** from your Landscape board. If you do not have any Forest tiles left, you cannot use the Slash-and-burn farmer.

Move the **Charcoal token** on your Glassworks or Brickworks wheel 2 spaces forward *(see P2)*.

Move the **Food token** on your Glassworks or Brickworks wheel 2 spaces forward *(see P2)*.

Woodcutter

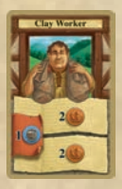
Remove a Forest tile** from your Landscape board. If you do not have any Forest tiles left, you cannot use the Woodcutter.

Move the **Wood token** on your Glassworks wheel 2 spaces forward.

Move the **Wood token** on your Glassworks wheel 2 spaces forward.

** In the rare case that you do not have any Forest tiles left, you still have to reveal or play this card. Even if you cannot use it, it still reduces the efficiency of your opponents' cards.

All of the following Specialist cards have an **entry fee**. If you cannot pay the entry fee of a Specialist card, you may not use that card. Regardless of whether you pay its entry fee or not, the card is still considered played. If your opponents have played it too, they may only use one of its abilities.



Clay worker

Pay 1 Water.

Move the **Clay token** on your Brickworks wheel 2 spaces forward.

Move the **Clay token** on your Brickworks wheel 2 spaces forward.

Fuel collector

Pay 1 Water.

Move the **Charcoal token** on your Glassworks or Brickworks wheel forward by a number of spaces equal to the number of Specialist cards left in **your** hand *(see P2)*. This way you can get up to 4 Charcoal *(or 5 in the solo game)*.

Move the **Wood token** on your Glassworks wheel 2 spaces forward.

Charcoal burner

Pay 1 Wood.

Move the **Charcoal token** on your Glassworks or Brickworks wheel 3 spaces forward *(see P2)*.

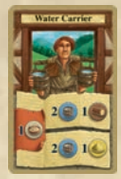
Move the **Charcoal token** on your Glassworks or Brickworks wheel 3 spaces forward *(see P2)*.
(P2 only applies to each ability individually. If you use both abilities, you may gain 3 Charcoal on one Production wheel and 3 on the other. You may of course gain all 6 of them on the same wheel.)

Fish farmer

Pay 1 Charcoal *(see P3)*.

Move the **Food token** on your Glassworks or Brickworks wheel 2 spaces forward *(see P2)*.

Move the **Food token** on your Glassworks or Brickworks wheel forward by a number of spaces equal to the number of **Ponds** you have *(see P2)*.



Water carrier
Pay 1 Food *(see P3)*.

On your Glassworks wheel, move the **Water token** 2 spaces and the **Wood token** 1 space forward.

On your Glassworks wheel, move the **Water token** 2 spaces and the **Quartz sand token** 1 space forward.

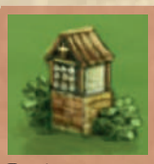
Example: Even with the Water carrier, it may matter in which order you use its abilities. Here, you may use both abilities, which is 4 Water in total, but you can only get 3 more Water. If you use the second ability first, you will have to rotate the Production wheel after gaining the Quartz sand. Then you will have enough room for 2 more Water from the first ability.

Appendix 2: The Building tiles

Beside the three Start buildings that are pre-printed on your Landscape boards, there are a lot of other buildings in this game that you can build. The following tables provide an overview of all the buildings in this game, including their building costs, point values and abilities. The buildings that you should use in an introductory game (that have a wayside shrine) are indicated by an asterisk (*).

Upgrades are placed on certain Start buildings. You may not place them on empty spaces of your Landscape board.

Among the buildings, there are 6 upgrades for the Start buildings (without a wayside shrine). They are indicated by a brick pattern on the left side and have the word "replaces" on them. (Upgrading a Start building does not increase the number of your buildings. This matters in the 3-player game when you have to determine the Start player of the last building period.)



Beginners pray at this wayside shrine.

General rules for all buildings:
(G1) When gaining goods, you may take fewer goods than provided.
(G2) When **gaining** 1 Food or 1 Charcoal, you may indicate them on either Production wheel. When gaining 2 or more Food, or 2 or more Charcoal in a single action, you have to indicate them **on one Production wheel or the other**. You may not split the gained goods between the wheels.
(G3) You **may not** use the same good or Landscape tile for more than one Building tile or Specialist card. *(For example, if you have a building that turns 1 Wood into 2 Water and another one that turns 1 Wood into 2 Food, you **may not** pay 1 Wood and gain both 2 Water and 2 Food. Either pay 2 Wood to gain both, or gain one or the other.)*
(G4) Two spaces or buildings are considered "adjacent" if they share an edge, i.e. if they are **horizontally or vertically** *(but not diagonally)* adjacent to each other. In other words, **this game does not care for diagonal**.
(G5) Building tiles like the Sand Island are still considered buildings even though their name suggests differently.

As stated before on page 4, there are three types of buildings: Processing buildings, Immediate buildings and Bonus buildings. Bonus buildings do not have an in-game effect but they may provide additional points at the end of the game.

Start buildings

Each player starts with the same three buildings.
The Start buildings are considered Bonus buildings and do not have an in-game effect

Name	Points	Bonus points at the end of the game
Brotherhood of the Masons	❄	1 point per Brick
Forest Glassworks	❄	1 point per Glass
Glassmaker's Colony	❄	0.5 points per Quartz sand

The Start buildings (connected by the Glass Road)

Processing buildings

Processing buildings are indicated by the blue ability box and a yellow arrow on the tile. You can use them **at any time and any number of times** during the game – unless you are in the middle of an action. When using them multiple times in a row, check if you have to rotate the Production wheels after each usage. *(Also, always keep G3 in mind.)*

Uwe: "The Processing buildings are the most important buildings in the early game. If you concentrate on the first Processing buildings you get and make good use of them, you are very likely to win the game."

Name	Cost				Points	Ability
Boarding House*	4	1			2	Pay 1 Charcoal and 1 Water to gain 4 Food *(see G2)*.
Builder's Hut*	3			1	2	Remove 1 Grove to gain 2 Clay.
Building Firm	1			2	2	Remove 1 Pit to gain 2 Clay and 1 Quartz sand.
Carving Workshop*	1	1			1	Pay 1 Wood to gain 2 Food *(see G2)*.
Charcoal Kiln*			3		0	Pay 1 Wood to gain 2 Charcoal *(see G2)*.
Clay Basin					0	Pay 1 Food and 1 Water to gain 3 Clay. *(This building does not have any building costs.)*
Clay Pit*	2				0	Pay 1 Water to gain 2 Clay.
Colonization House*	1		1		1	Remove 1 Forest to gain 1 Charcoal.
Cooperage*	1			2	3	Pay 1 Wood to gain 2 Water.
District Offices	1	1			3	Remove from the game 2 buildings from your private offer to gain a Landscape tile of your choice *(Pit, Grove, Pond)*. Place it on an empty space of your board. *(The Specialist card "Feudal Lord" creates your private offer.)*
Farmstead		1	2		1	Remove 1 Pond to gain 2 Food and 1 Water *(see G2)*.
Forester's Hut*			2	1	2	Remove 1 Pit to gain 2 Wood.
Hardware Store*	1			1	1	Pay 1 Wood to gain 2 Clay.
Inn*	2	1		1	3	Pay 1 Charcoal to gain 2 Quartz sand *(see G2)*.
Joinery*		1	3		2	Pay 1 Wood and remove 1 Forest to gain 4 Food *(see G2)*. *(If you do not pay the Wood, you may not remove the Forest.)*
Kiln*	2			2	3	Pay 1 Charcoal to gain 2 Clay.
Office		1	1		2	Remove from the game 1 building from your private offer to gain 1 basic good of your choice. *(Basic goods are Charcoal, Clay, Food, Quartz sand, Water and Wood. The Specialist card "Feudal Lord" creates your private offer.)*
Potash Manufacturer	1		1	1	1	Pay 1 Water and 1 Wood to gain 4 Charcoal *(see G2)*.
Reed Hut			1		0	Remove 1 Pond to gain 2 Wood.
Roofing Company		1	3		3	Pay 1 Brick to gain 2 basic goods of the same type *(see G2)*. *(You cannot gain 2 different goods. Basic goods are Charcoal, Clay, Food, Quartz sand, Water, and Wood. Glass and Bricks are not considered basic goods.)*
Sand Factory*	3		1	1	2	Pay 1 Food to gain 2 Quartz sand.
Sand Pit*	1				0	Pay 1 Water to gain 2 Quartz sand.
Sand Producer*	1		1		0	Pay 1 Wood to gain 2 Quartz sand.

Name	Cost				Points	Ability
Sand Screening Plant*	3			1	2	Pay 1 Clay to gain 2 Quartz sand.
Sandstone Factory	2			2	4	Pay 3 Quartz sand to gain 1 Brick.
Sawmill	1		2	2	2	Remove 1 Forest to gain 2 Wood.
Shingles Manufacturer	1		3		1	Remove from the game 2 buildings from your private offer to gain 1 Brick. *(The Specialist card "Feudal Lord" creates the private offer.)*
Soup Kitchen*	2		2		1	Pay 1 Water to gain 2 Food *(see G2)*.
Spa*	1	2	3		4	Pay 1 Charcoal to gain 2 Water.
Swamp Hut*			2		1	Remove 1 Pond to gain 2 Charcoal *(see G2)*.
Tree Nursery			2		0	Remove 1 Grove to gain 2 Wood and 1 Food.

Immediate buildings

Immediate buildings are indicated by the parchment-like ability box. After building an Immediate building, you have to carry out its one-time effect immediately. Once this is done, the building has no more use in the game *(except the Tavern)*.

Uwe: "Immediate buildings are much like the Specialist cards: You pay something to get something else. After that it does not influence any of your decisions anymore. You can build them in the early game as well as in the end game."

Name	Cost				Points	Ability
Artists' Colony	1				1	Place this building on top of your Start building "Glassmaker's Colony". Immediately gain 1 Glass. *(You cannot build this building if you have already upgraded your Glassmaker's Colony with another building.)*
Boathouse	1		2		2	Immediately gain 1 Charcoal per Pond you have. Indicate the Charcoal on one Production wheel.
Builders' Depot*				1	0	Immediately gain 3 Wood and 3 Clay.
Buttery*	2		1		1	Immediately gain 3 Food on each of your Production wheels.
Carpenter's Workshop*			1	2	2	Immediately gain 7 Wood.
Clay Depot			1	1	2	Immediately gain 2 Clay per empty space that is adjacent to this building *(see G4)*.
Clay Lake*	2				0	Immediately gain 7 Clay.
Country House*	2	1		1	4	Immediately place up to 2 Landscape tiles of the same type on empty spaces that are adjacent to this building *(i.e. 2 Pits, 2 Groves or 2 Ponds; see G4)*.
Fishery		1		1	2	Immediately carry out the following action any number of times *(or do not do it at all)*: remove 1 Pond to gain 3 Food and 1 Water. *(For each action individually, choose one Production wheel to indicate the Food on.)* Rotate the Production wheels after every action if necessary.
Forest Hut		1	1		2	Place this building on top of your Start building "Forest Glassworks". Immediately gain 5 Wood. *(You cannot build this building if you have already upgraded your Forest Glassworks with another building.)*
Fuel Depot*	1			1	1	Immediately gain 7 Charcoal *(see G2)*.

Name	Cost				Points	Ability
Grain House*	2		3		2	Immediately gain 7 Food *(see G2)*.
Grove Court*	2	2			4	Immediately place 1 Grove on each empty space that is adjacent to this building *(see G4)*.
Hot Springs		2	2		4	Immediately gain a number of Charcoal equal to the number of Water you have. Indicate the Charcoal on one Production wheel. *(Keep the Water.)*
House of the Brotherhood	3	2			4	Place this building on top of your Start building "Brotherhood of the Masons". Immediately gain 4 Clay. *(You cannot build this building if you have already upgraded your Brotherhood of the Masons with another building.)*
Landscaping Office		2	4		3	Immediately carry out the following action any number of times *(or do not do it at all)*: remove 1 Pit to gain 2 Clay and 2 Quartz sand. Rotate the Production wheels after every action if necessary.
Loess Island	2				1	Immediately gain 2 Clay per Pond that is adjacent to this building *(see G4)*.
Loess Plateau					-1	Immediately place 1 Pit on each empty space that is adjacent to this building *(see G4)*. *(This building does not have any building costs.)*
Log Driver*			3		1	Immediately gain a number of Wood equal to the number of Water you have. *(Keep the Water.)*
Lumber Storage*	1				1	Immediately gain 4 Wood.
Sand Deposit*					0	Immediately gain 3 Quartz sand. *(This building does not have any building costs.)*
Sand Island	1				1	Immediately gain 2 Quartz sand per Pond that is adjacent to this building *(see G4)*.
Sculpture Workshop		1	2		2	Immediately gain a number of Food equal to the number of Wood you have. Indicate the Food on one Production wheel. *(Keep the Wood.)*
Shed*	1				0	Immediately gain 1 Glass.
Storage*	2		2		1	Immediately gain 2 Bricks.
Tavern	1		1		0	Immediately carry out the one-time effect of an Immediate building that is adjacent to this building *(see G4)*. *(You may not use adjacent Processing buildings.)*
Water Tank*	3		1		1	Immediately gain 7 Water.
Water Tower*			1	3	4	Immediately place 1 Pond on each empty space that is adjacent to this building *(see G4)*.
Winery		1	1	2	4	Immediately carry out the following action any number of times *(or do not do it at all)*: remove 1 Grove to gain 3 Food and 1 Wood. *(For each action individually, choose one Production wheel to indicate the Food on.)* Rotate the Production wheels after every action if necessary.
Wood Depot			1		1	Immediately gain 2 Wood per empty space that is adjacent to this building *(see G4)*.
Wood Trader	1		2	1	1	Immediately carry out the following action any number of times (*or do not do it at all*): pay 1 Wood to gain 2 other basic goods of the same type, i.e. 2 Charcoal, 2 Clay, 2 Food, 2 Quartz sand or 2 Water. Your choices may differ every time. Rotate the Production wheels after every action if necessary.

Bonus buildings

Bonus buildings are indicated by the purse in the ability box.
When scoring a Bonus building, you **do not lose** any goods. *(Thus, the same goods may score multiple times for different Bonus buildings.)* The requirements of these buildings do not need to be met during the game. It is sufficient that they are met at the end of it.

Uwe: "You may play towards specific Bonus buildings from the beginning of the game, but do not waste your resources too early on them. In the early game, you should only build Processing and Immediate buildings, if possible, to get your game going. The more expensive a Bonus building is, the more you should wait before getting it. (To estimate their relative costs, count Glass as 5 basic goods and Bricks as 3.)"

Name	Cost				Points	Bonus points at the end of the game
Bathhouse	1	2		1	❄	2 points per Pond that is adjacent to this building *(see G4)*
Clinker Plant*	3	1	3		❄	1 point per Brick paid as building costs *(58 Bricks are used to build the 93 buildings)*
Coal Facility	3		3	1	❄	1 point per Charcoal on the Production wheel with the lower number of Charcoal *(in case of a tie, only one Production wheel counts)*
Coal Storage*			3		❄	1 point per 3 Charcoal *(i.e. 0/1/2/3/4 points for 0-2/3-5/6-8/9-11/12-14 total Charcoal)*
Estate*	2	1		2	❄	2 points per full set of 3 different Landscape tiles *(Pit + Grove + Pond)*
Extension*	1		2	1	❄	1 point per building that is adjacent to this building *(see G4)*
Factory	4			3	❄	2 points per Pit that is adjacent to this building *(see G4)*
Fish Yard	1		2		❄	4 points if you have at least 4 Ponds left in a 2x2 shape. *(You cannot gain more than 4 points with this building.)*
Floodgate*	1		3	2	❄	Determine the largest network of connected Pond tiles on your board. 1 point per Pond in that network *(see G4)*.
Food Locker*				1	❄	1 point per 3 Food *(i.e. 0/1/2/3/4 points for 0-2/3-5/6-8/9-11/12-14 total Food)*
Forester's Lodge	3				❄	4 points if you have at least 4 Groves left in a 2x2 shape. *(You cannot gain more than 4 points with this building.)*
Forester's Office*	1			1	❄	1 point per Forest
Friends of Nature House	2		1		❄	4 points if you have at least 4 Pits left in a 2x2 shape. *(You cannot gain more than 4 points with this building.)*
Glassmaker's Village	3		2	1	❄	*(Immediately place this building on top of your Start building "Glassmaker's Colony". You cannot build this building if you have already upgraded your Glassmaker's Colony with another building.)* 1 point per Quartz sand *(instead of 0.5 points)*
Glassworks	3	1		1	❄	*(Immediately place this building on top of your Start building "Forest Glassworks". You cannot build this building if you have already upgraded your Forest Glassworks with another building.)* 3 points per Glass *(instead of 1 point)*
Glazier's workshop*	1		1	1	❄	1 point per Glass paid as building costs *(39 Glass are used to build the 93 buildings)*
Half-Timbered House	2	1	1		❄	1 point per Immediate building *(indicated by the parchment-like ability box on the front and the hour glass on the back)*

Name	Cost				Points	Bonus points at the end of the game
Hunting Lodge	1				❄	3 points if you have at least 4 Forests left at the end of the game
Mansion	2	2	2		❄	2 points per Grove that is adjacent to this building *(see G4)*
Masons' Guild	2	1	4	1	❄	*(Immediately place this building on top of your Start building "Brotherhood of the Masons". You cannot build this building if you have already upgraded your Brotherhood of the Masons with another building.)* 3 points per Brick *(instead of 1 point)*
Plant Nursery*	1	2			❄	Determine the largest network of connected Grove tiles on your board. 1 point per Grove in that network *(see G4)*.
Potter's Parlor*	1			1	❄	1 point per 2 Clay *(i.e. 0/1/2/3 points for 0-1/2-3/4-5/6-7 Clay)*
Pottery*	2	1	1	2	❄	1 point per Clay
Sediment Factory*	2		3	2	❄	Determine the largest network of connected Pit tiles on your board. 1 point per Pit in that network *(see G4)*.
Slipway*	2		2	2	❄	1 point per Wood
Springhouse*	1		2		❄	1 point per 2 Water *(i.e. 0/1/2/3 points for 0-1/2-3/4-5/6-7 Water)*
Storehouse	2	1		1	❄	1 point per Food on the Production wheel with the lower number of Food *(in case of a tie, only one Production wheel counts)*
Village Church	2	2	2	2	❄	4 points + 1 point per empty space that is adjacent to this building *(see G4, and keep in mind that you may remove Landscape tiles from your board at any time)*
Warehouse	2		3		❄	1 point per Good token in sector 4, 5, 6 and 7 at the end of the game
Water Mill*	4		4	2	❄	1 point per Water
Woodcarver's House*		1	1		❄	1 point per 2 Wood *(i.e. 0/1/2/3 points for 0-1/2-3/4-5/6-7 Wood)*

The Bavarian Forest

The northern part of Lower Bavaria is almost entirely covered by the Bavarian Forest. This and the Bohemian Forest on the Czech side form the largest forested area in Middle Europe. At the time of the Iron Curtain, you would not be able to notice that. Up to the present day, the "Forest" – as the people in Lower Bavaria simply call it – is also known as "Bavarian Siberia". Back then, the woodlanders that used to work on stony soil were glad to get a job in one of the glassworks in the "woods". For centuries, glassblowing was the only source of income apart from the impoverished agriculture. Nowadays the golden age of the glassworks is over. In 1965, about 3000 people were living in the "red bastion" of Frauenau and 1100 of them were working in the glass industry. By 2005, this number fell down to 250 despite the fact that the population had not changed. Today, glassblowing is only being practiced as a tourist attraction for informational purposes. In Frauenau, they even built a glass museum.

The Bavarian Forest is popular for its national park – the first one of its kind in Germany. Very few know that this national park is uninhabited and nature is left there to take its own course. Two million people visit it every year. One of the preferred tourist attractions is the open air museum in Tittling at the edge of the park. It still shows the traditional wooden architecture that was characteristic of the Bavarian Forest. Another attraction is the brickworks museum in Flintsbach; its main feature is the colossal kiln from the 19th century.

(Sources: www.Bayerischer-Wald.de, www.Landkreis-Deggendorf.de, www.Die-Glasstrasse.de, www.Borgwedel.de, Fritz Pfaffl, Die Ziegeleien im Bayerischen Wald, Die Geologie Bayerns, Band VII, Ohetaler Verlag, as well as Teja Fiedler, Gebrauchsanweisung für Niederbayern, Piper, S. 100-111, and Wikipedia)

The parish church "Assumption of Mary" of the parish in Frauenau

Uwe: "For those of you interested in game theory: beside the three types of buildings used in this game, I make a distinction between the following three types.

- *Whenever buildings: You have to pay attention at all times if you do not want to miss a situation where this kind of building may be useful for you. This can be tedious at times. On the other hand, it may be appealing to try to elaborate strategies with this kind of building.*
- *As-soon-as buildings: These are much like Immediate buildings except that they do not trigger immediately, but only under the right circumstances. This is appealing because players have to decide whether to wait for the right moment or to build it right away.*
- *As a sixth type of building, I consider the rule-bending ones that change the rules for their owner."*