



# BRIDGE PROJECT

PLANNING - CONSTRUCTING - TESTING

## HEALTH PRECAUTIONS

When playing for an extended period of time you should take a 15 minute break every hour. Please do not play if you are tired or need sleep. Play in a well-lit room and sit as far from the screen as possible.

A low percentage of people may experience epileptic seizures triggered by light flashes or patterns we are confronted with every day. Sometimes these seizures may occur while watching TV or playing video games. Even players who have never had a seizure before might suffer from undiagnosed epilepsy.

If you have epilepsy please consult your doctor before playing computer games. Consult a doctor immediately if you experience any of the following symptoms while playing: dizziness, altered vision, involuntary movements, loss of awareness, disorientation and/or cramps.

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## WELCOME

Thank you for buying “The Bridge Project”! In this simulation you are responsible for the construction of bridges and you can choose from a variety of different building materials. The bridges you construct must pass a series of so called official tests to prove that they will not collapse under the weight of cars, buses, tanks and trains and can even survive heavy storms and earthquakes without taking damage.

This simulation is based on the actual laws of physics, so constructing bridges will also give you a good idea of what engineering is all about. “The Bridge Project” features 48 maps which are subdivided into four groups. You can build bridges in different landscapes each one has its own challenge. In addition you can also use the map editor to create your own landscapes to build bridges in. The price of a bridge is determined by the type and amount of materials used. The cheaper and the more stable a bridge is, the more points the builder receives. So plan and construct your bridges with caution and if they pass all tests chances are that they will make it onto the list of world records.

### 1. INSTALL/UNINSTALL BRIDGE PROJECT

After starting the installer **setup.exe** please follow the on-screen instructions to install the game on your computer.

Please note that an active internet connection is required during the installation process. It is only needed for the activation and is not needed to play the installed version.

To remove The Bridge Project click on [Programs] in the Windows start menu, choose [Halycon Media], then [The Bridge Project] and click on the uninstaller symbol.

## 1.1 Serial Number

In order to install The Bridge Project you need a serial number. You will find the serial number either inside the game's packaging (on the inlay) or on the cover of this manual. If you purchased a downloadable version of the game you will receive your serial number by e-mail.

Please do not share this number. Only one registration per serial number of the game is possible at MyHalycon.

## 2. STARTING THE GAME



Before starting the actual game you can adjust some of the basic settings. A menu allows you to change the resolution and quality of the graphics. You can also choose between fullscreen and windowed mode.

### 2.1 Resolution

The available screen resolutions depend on your computer. Different resolutions are offered depending on your graphics card. The minimum screen resolution is 1024x768. Higher resolution is more demanding for your computer. If you experience game speed problems, select a lower resolution.

### 2.2 Quality of Graphics

You can select one of three quality levels (Fastest / Good / Fantastic) which influence both game appearance and performance. The higher the quality of graphics, the more demanding it is for the computer. You can also choose between running the game in fullscreen or windowed mode. If you experience game speed problems, you should select a lower quality. The highest game speed is achieved with "Fastest" graphics quality.

## 3. START MENU

You can start your game right away using the default options. The game saves your profile and will continue from the map you played last. When first starting the game select the option "New game" and create a profile. The "Play"-button continues the game on the current map defined in your profile.



The "+"-button gives you additional options:

- » Help: Information, keys and controls used in the game.
- » Options: Graphics and sound settings.
- » Play unlocked maps: Play on available maps that are already unlocked.
- » Create a map: Create your own maps using the 3D editor.
- » Play on a created map: Play on a map you created yourself.
- » Load profile: Select an existing profile.

## 4. PROFILES



The profile saves your game information. When starting the game the profile that was used last will automatically be loaded and the game continues where you stopped last time. A maximum of eight profiles can be created. You can also delete a profile and then create a new one.

When using a new profile, at the beginning only the first map of each group is available. If you succeed in building the bridge on that map, further maps will be unlocked. In the course of the game more and more materials and challenges are unlocked. Your bridges have to pass the official tests and you will score points for your constructions. The less expensive and more efficient the bridge is, the more points you receive.

## 5. MAP GROUPS



Maps are divided into four groups: Rural, Cities, Canyons and Varied. Each group contains 12 maps with different challenges. In total you can build 48 bridges of different sizes and levels of complexity.

Within a group you have to master the challenge of the current map in order to unlock the next map. The maps contain fixed types of materials and the bridge has to be constructed with the materials that are available.



The official tests vary from map to map as well. There are tests with cars, buses, trains, tanks, storms and even earthquakes.

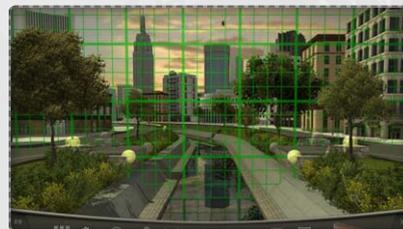
## 6. HOW TO PLAY



There are two in-game modes: Editor Mode for building and Simulation Mode for testing.

In the beginning the map is shown and you get information about the bridge you are supposed to build, the available materials and the official tests this bridge has to pass. In order to complete the level, the bridge has to pass all of the official tests successfully.

## 7. EDITOR MODE



In editor mode you construct your bridge. You build the bridge by adding and removing materials. If you want to test the bridge you switch to simulation mode, which follows the actual laws of physics. The "Test"-button starts the simulation and is located at the lower edge of the screen.

### 7.1 Controls in Editor Mode



#### Test Bridge

Starts the simulation to test the construction. You can test your bridge at any time.



#### Centre camera

Focus the camera on the bridge [F1]



#### Undo

The last action is undone. Undo [U]



#### Select

Parts can easily be selected, duplicated, moved or removed this way. [Space]



#### Options

Activates the options menu. Change graphics and sound settings.



#### Information (About the Bridge)

Shows information about the current bridge. Which materials have been used so far and how expensive the bridge is at the moment.



#### Screenshot

Take a screenshot of the current screen. Pictures are saved in the following game folder: "\Screenshots". [F12]



**Help:**  
Here you get general tips for the game and can look at the controls.



**Exit**  
Exit to the main menu



**Sound on/off**  
Activate or deactivate sound.



### Camera Positions

At the upper edge of the screen you find the options for changing the camera position. The arrow symbols stand for the positions. Central view of the bridge [F1], view from the top [F2], view from the left [F3], view from the right [F4].

### Cameras

Menu for camera options.

**Rx-Mode/Colour Mode:** Switches all colors in the scenario to black and white and reduces contrast so you can focus on the construction of the bridge. However, the parts of the bridge and the vehicles are still shown in color.

**Autofocus:** Focuses the view on the bridge in construction. This option can be turned on or off any time.

**Presentation:** Tracking shot is used to present the current map.



### Building Options

Options include - Auto Roadway, Cross bars, Build mirror and Expert mode.

#### Building options

Here you can activate or deactivate building options:

**Auto-Roadway:** Automatically adds the road to the previously created basic construction of the bridge.

**Cross bars:** Creates a crossbar that provides extra stability. This option is used with mirror construction.

**Build mirror:** An existing construction is "mirrored" on the opposite side of the bridge. Build a part of the bridge on one side (front) and the same construction will be transferred to the other side (back).

**Expert mode/normal mode:** Start or stop expert mode, which offers additional buttons and features.



### Menu (Map Menu)

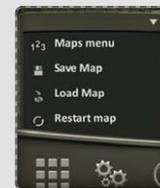
In Map Menu certain map functions can be activated:

**Maps menu:** Any available map can be selected to play the game.

**Save map:** The current map will be saved.

**Load map:** A previously saved game is loaded. You can save and reload the current construction at any time. Game progress is saved automatically once you leave a map or complete a level.

**Restart map:** Restarts the current map from the beginning and all existing parts of the bridge will be deleted.



## 7.2 Materials

Depending on the map, the available materials for bridge construction are limited and of a different kind. Materials differ in price, weight and durability. Choose materials that are appropriate for the challenge and be sure to consider their different qualities. Your goal should be to build a reasonably priced but stable bridge. You can choose from the following materials:



#### Wood

Wood is light and cheap but provides the least stability. The question is - can it support the weight of heavy vehicles like tanks and trains?



#### Iron

Iron is more expensive than wood but offers higher stability. This material can be used for bridges that have to carry heavy vehicles.



#### Steel

Steel is one of the most durable materials in the game. However, both price and weight are very high. Steel should be used for big bridges that have to be very durable.



### Cables

Cables are light and cheap but not very durable. Cables cannot be used to build supporting parts of the bridge but you can combine them with other materials to save money.



### Roads

Roads are heavy and expensive but necessary because vehicles need them. As soon as the basic construction is done the road will be automatically added to the bridge.



### Hydraulic systems

Hydraulic systems are expensive and are used for bridges that need to open. In some cases to allow bigger ships to pass under the bridge.



### Suspension cables

Suspension cables offer good durability at a reasonable price and are used to build suspension bridges. During construction you can regulate cable tension, which is quite important for the stability of the bridge.



### Concrete

Concrete is used for the foundation and beams of a bridge, it is not exactly cheap but offers high durability. Definitely not necessary for every bridge but essential when building bigger bridges.

#### TIP: Do you know the official The Bridge Project website?

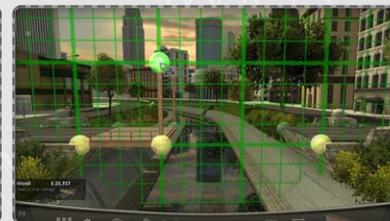
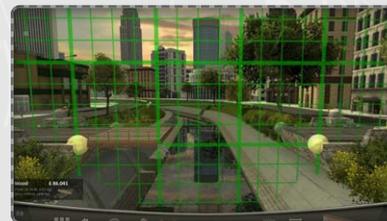
At [www.bridgeproject-game.com](http://www.bridgeproject-game.com) you can find more tips & tricks and can compare your constructions with those of other players in a worldwide online ranking system. You should visit the site. Who knows, maybe there's a contest going on!

## 8. CONSTRUCTING BRIDGES

The bridge can be built using the mouse. By clicking with your mouse you can build structures and by moving the mouse you can move across the construction grid.

1. By left-clicking your mouse you set the starting point of the construction.
2. Move the mouse to set the size and direction.
3. Left-click again to complete the construction.

On the lower part of the screen you can choose materials and can also see how much is used and what it costs.



Once a structure has been built (after the second click) you can start building a new structure. Right-click to cancel a construction process. Each structure can be up to four fields long or big, corresponding to 5 meters in height. For long bridges with a length of more than 30 meters the maximum number of fields is eight.

### 8.1 Anchoring and abutment

When it comes to constructing bridges anchoring is an important factor because this is where the bridge's base is resting. All bridges you have to build in the game have at least two anchorage points – abutments that are connected to the ground and located at the same height as the road. These abutments near the edges are essential parts of the construction but sometimes (especially when building larger bridges) they are not enough to guarantee stability. Anchoring varies from bridge to bridge and map to map. It depends on the number of available anchor points and elements you have - think carefully.

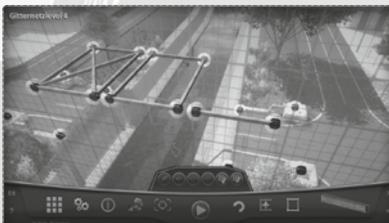
PLEASE NOTE: In construction mode you can see in which areas you cannot build anything. Those areas are marked in red. In those areas vehicles would crash into cross braces. You can use concrete to build new anchor points and provide more stability for the bridge.



However, this material is not available for every bridge, so you will often have to look for alternatives.

## 8.2 Structures

In the game you are free to choose the structure of the bridge. Of course there are options that make construction easier but you can (ex)change every single structural component. Default options are mirror construction, crossbar and auto-roadway, so you can build complete structures with a single click. In the example picture you can see three different structures: one mirror construction with crossbar (left), one mirror construction without crossbar (middle) and a basic structure (right). Needless to say, the durability of each of these three structures varies significantly.



The mentioned options (mirror construction, crossbar and auto-roadway) can be activated and deactivated at any time.



By means of simple mouse clicks the bridge can now be erected step by step. Afterwards the bridge should be run through the official tests in order to prove that it is safe to use. Whether your bridge passes the tests or not is a question of physics.

## 8.3 Connections

Every part has to be connected to another part for the construction to make sense. Therefore on both ends of each part there is a connecting piece. During construction the parts are connected so that complex structures can be formed. The stability of the connection depends on the material the connected parts are made of.

The following connections are available:

### Solid connections:

Connections with the ground or another solid structure like a concrete foundation for example. These solid connections form the anchor points of the bridge and their number varies from bridge to bridge and map to map.

### Normal connections:

Connections at the ends of the different parts. By putting single parts together the structure of the bridge is formed. These connections are not anchor points and gravity can make them collapse.

### Open connections:

Open connections are used in bridges that need to open. As long as they are closed they act like normal connections but by means of hydraulic systems these connections can be opened.



## 8.4 How to Select Parts

Every part of the bridge and every connection can be selected by right-clicking with your mouse. When selecting a part, information is displayed:

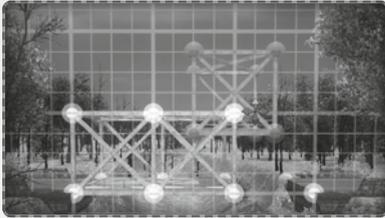
When selecting a connection you can either remove it or transform it into an open connection (by using hydraulics). When you remove a connection, several parts of this connection are removed as well.



When you select a part you get information about its size and weight. Every part can be removed individually. But you can not only select single parts with the Select-button (or the spacebar) but also groups of parts. Move the mouse cursor over the parts while clicking and holding the right mouse button to mark the group of parts you want to select. All selected parts are shown in blue.

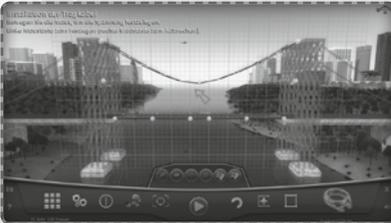


Once a group has been selected an options menu appears on the right side of the screen. The following options are now available for the chosen group of parts: Cancel, delete, duplicate and



move the selection. This way, basic bridge modules can be created, selected and duplicated, which can make bridge construction easier. In addition, the option to easily delete or move complete groups of parts also makes it easier to change your construction.

## 8.5 Use of Suspension Cables

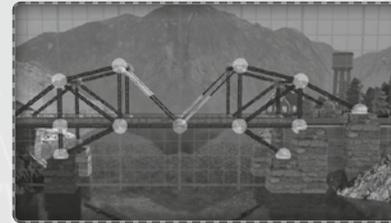


Suspension cables can be used to build suspension bridges whose structures are supported by suspension cables. Suspension cables are connected in the middle of two points of a bridge and after that you set the cable tension.

So, when using suspension cables you should not forget to set the tension, which is done as follows: Set the starting point and endpoint of the cable, which is normally done with the right mouse button. Then move the mouse up to raise the tension or move it down to lower the tension. While moving the mouse you see the curve of the cable change and as soon as you are satisfied with the results click the left mouse button to finish setting the tension. You also get tips on-screen, so using suspension cables should be quite easy.

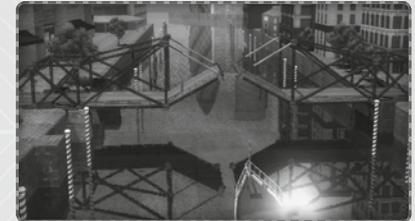
**PLEASE NOTE:** A suspension cable should always be in the form of a parabola to ensure maximum weight-bearing capacity. So, set the starting point and endpoint of the suspension cable and then move the mouse down in order to set the tension as shown in the picture.

## 8.6 Use of Hydraulic Systems



Some bridges have to open in order to let large ships pass. For these bridges hydraulic systems can be used. By means of hydraulics parts the bridge can be opened and then closed again. The hydraulic system is connected to the construction like any other part of a bridge. In simulation mode a ship arrives and the hydraulic system lifts and lowers the bridge in order to let the ship pass and then make sure the bridge can be used again by the other vehicles.

It is important to transform the connections of the bridge parts that are supposed to open into "open connections"! To create an open connection select the connection in question with the right mouse button and choose the option "open joint" from the menu. In editor mode open connections are shown in red.

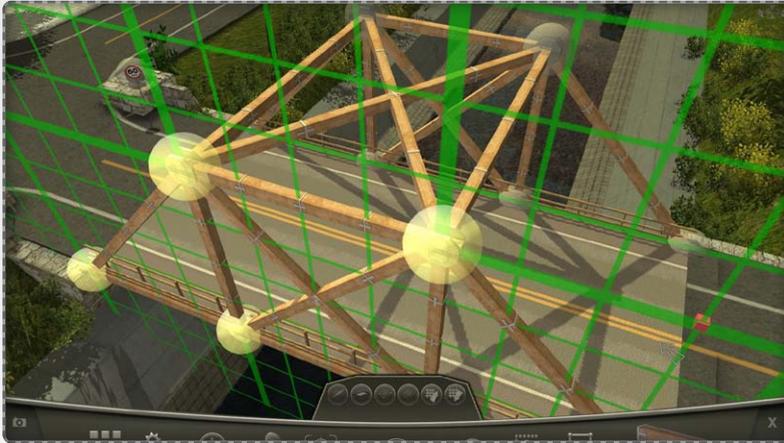


## 8.7 Use of Concrete



You can use concrete to create solid anchor points or foundations of a bridge. Concrete is laid by left-clicking a spot on the ground. Concrete can and should be used when constructing larger bridges in order to create a solid foundation for it to rest on.

## 8.8 Expert Mode

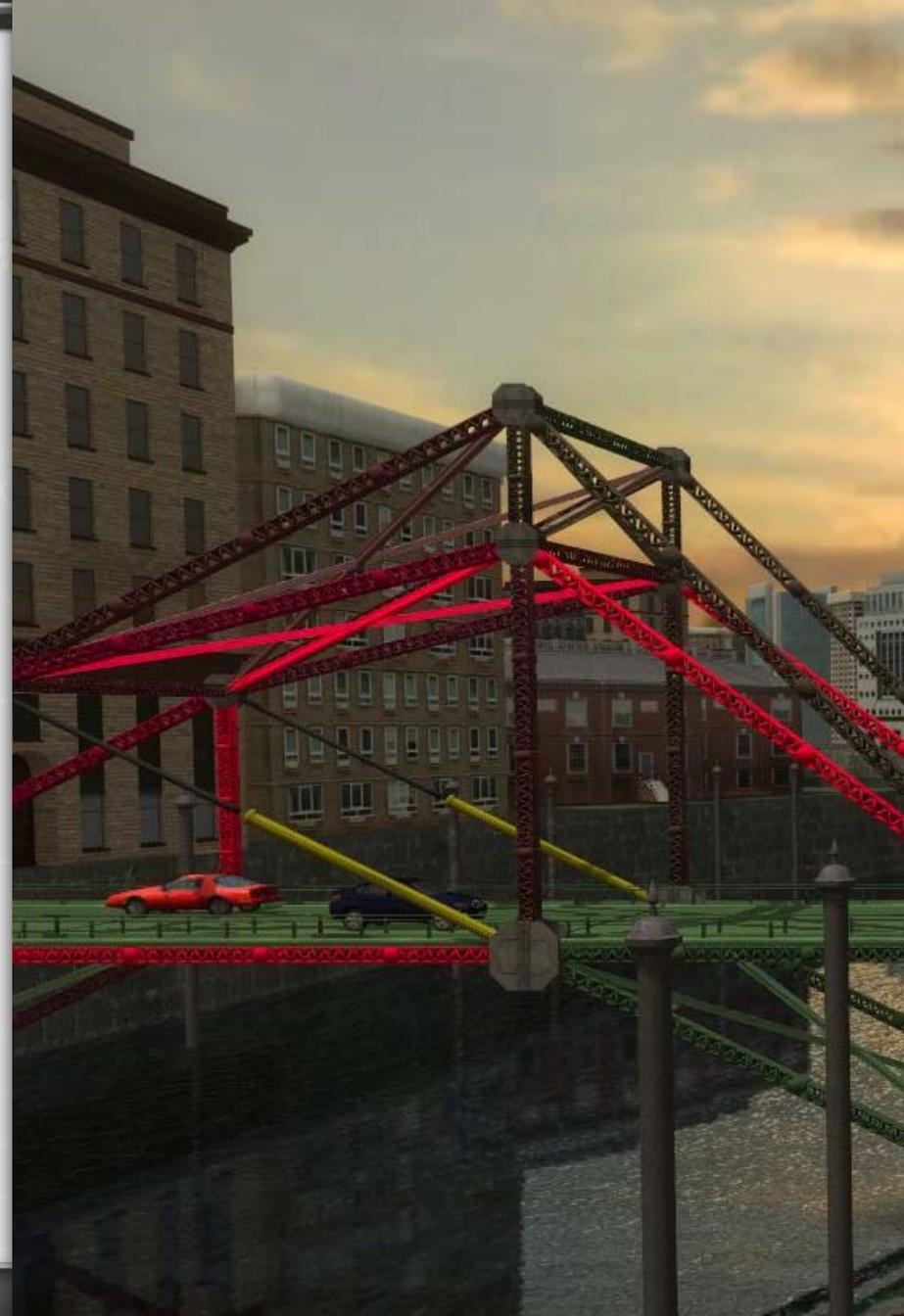


In addition to the normal mode there is also an expert mode. You can activate or deactivate it with the "X"-button. When it is activated additional buttons appear at the lower edge and in the middle of the screen. These can help you construct a more complex bridge.

In expert mode you can flip through the grid levels to create several different structures in them, which is not possible in normal mode. With the keys "page up" and "page down" you move through the levels of the grid. This is very useful in order to raise durability in different areas of the bridge and also to save materials for selected parts of the bridge.

Expert mode also features the options "Simple Structure", "Auto-Roadway", "Cross bars" and "Build Mirror", which allow you to individually adjust parts on every level of the grid.

**TIP:** Compare your construction with those of other players in the worldwide online ranking system at [www.bridgeproject-game.com](http://www.bridgeproject-game.com) and get free extra levels.



1 Zylinderschraube M12x30  
1 Ralle

## 9. KEYS AND CONTROLS

You can control this game with the mouse and keyboard. Commands can be performed using the mouse or a key on the keyboard.

Left mouse button	Selects buttons and options, builds structures.
Right mouse button	Selects basic bridge components.
Mouse wheel	Zoom in/out
Right mouse button + move mouse	Move camera toward or away from bridge.
Mouse wheel + move mouse	Change camera angle.
A summary of the keyboard shortcuts:	Change camera position while maintaining angle.
<b>Key</b>	<b>Function</b>
<b>W A S D</b>	Move camera during game
<b>W A S D</b> + <b>CTRL</b>	Move camera quickly during game
<b>W A S D</b> + <b>SHIFT</b>	Change camera angle
<b>↑ ↓ → ←</b>	Change camera angle
<b>↑ ↓ → ←</b> + <b>CTRL</b>	Change camera angle quickly
<b>Q</b>	Zoom in, move camera forward
<b>Z</b>	Zoom out, move camera backwards

### Cameras

<b>F1</b>	Centre camera
<b>F2</b>	Top camera view
<b>F3</b>	Camera on left edge
<b>F4</b>	Camera on right edge
<b>F5</b>	Vehicle camera 1 – camera behind vehicle
<b>F6</b>	Vehicle camera 2 – camera diagonally in front
<b>F7</b>	Vehicle camera 3 – camera in front of vehicle
<b>F8</b>	Vehicle camera 4 – side camera

### Options

<b>F9</b>	Save map
<b>F10</b>	Load saved map
<b>F11</b>	Options menu
<b>F12</b>	Save screenshot

### Materials

<b>1</b>	Wood
<b>2</b>	Iron
<b>3</b>	Steel
<b>4</b>	Cable
<b>5</b>	Hydraulics
<b>6</b>	Suspension cable
<b>7</b>	Concrete
<b>8</b>	Deck

### Commands

<b>T</b>	Start/end simulation
<b>P</b>	Pause
<b>U</b>	Undo
<b>O</b>	Redo
<b>+</b>	Daytime: increase hour
<b>-</b>	Daytime: decrease hour

### Construction

<b>X</b>	Normal/Expert Mode
<b>L</b>	Basic structure
<b>M</b>	Mirrored construction
<b>N</b>	Automatic Roadway
<b>B</b>	Cross Bar
<b>R</b> or Page Up	Grid backwards
<b>F</b> or Page Down	Grid forward

### Miscellaneous

<b>ENTER</b>	Restart map
<b>Insert</b>	Bridge information
<b>SPACE</b>	Select components
<b>Home</b>	Centre bridge
<b>ESC</b>	Quit



## 10. SIMULATION



In simulation mode you can test your bridge. You cannot make any changes to your bridge during the simulation, you can only watch how the bridge performs in the tests.

Is the bridge able to carry its own weight? If it is, the official tests

will begin. On the right side of the screen you will find information on the tests. If you would like to make changes to your bridge, you need to exit the simulation mode and return to the editor mode. In simulation mode you have different commands from the ones in the editor mode:



### Edit

Exit the simulation mode and return to the editor mode



### Official tests / manual tests

In order to complete a level, you need to take the official tests. You can take those tests (as well as your own, so-called manual, tests) at any time. Official tests, however, are pre-defined and will be performed in a specified order. For manual tests you can choose the order and number of vehicles yourself.



### Automatic cameras

During tests you can activate the automatic cameras or choose the position of the cameras manually. Automatic cameras are the default setting and their position may change from time to time. When you disable this option, you can choose the camera views during the simulation yourself.



### Pause

You can pause the simulation at any time.

## Stress

During a simulation you can choose to have the stress of single components displayed. With this useful function you can identify weak spots and change your construction if necessary.

When “stress“ is turned on, components subject to stress are displayed in red. If a component does not change colour, it is not subject to stress.

The stress exerted on components is displayed in different ways:

**Joints stress:** Shows components whose connections are subject to significant stress. The bridge is likely to break in such places.

**Movement stress:** Shows components which move significantly. This movement may indicate a lack of stability at this part of the bridge.

**Angular stress:** Shows the components subject to the strongest angular movement.

This can be used to identify twisting and bending of components.

**Total stress:** Shows components subject to the most stress, that is the sum of all elements described above.

**do not show:** stressed components will not be displayed in colour.



## 10.1 Manual Tests

During the simulation you can turn off the official tests and start your own, manual tests. Choose one of the available tests and specify the vehicle type and number or choose a storm or earthquake. To the right of the name of the test are the “+/-” (plus and minus) button with which you can increase or decrease the number. For storms and earthquakes the numbers (1 to 5) refer to the force of the event. In this manner you can find out, for example, whether your bridge is able to resist even greater stress than required for passing the official tests. Of course, you may also use this function just to have fun and find out when and how your bridge will eventually collapse...



## 10.2 Simulation speed

You can adjust the speed with which the simulation runs.



## 10.3 Tests

During the game your bridge will have to pass various tests. The first challenge will be whether your bridge can carry its own weight, which at times may be quite difficult to achieve. Then your bridge will have to undergo a series of official tests. Most tests are performed using vehicles of various types, but in some cases your bridge will have to stand up to storms and earthquakes.



### Cars

The easiest test in the game. Cars weigh between 1 and 2 tonnes and their number can be between 1 and 9.



### Buses

These are heavy vehicles, each of which can weigh as much as 10 tonnes. The number can be between 1 and 9.



### Tanks

These are very heavy vehicles, each of which weighs about 50 tonnes. There can be 1 to 9 tanks per test.



### Locomotive

Locomotives are extremely heavy vehicles and a real challenge for any bridge. Trains are made up of an additional 1 to 5 carriages, each of which weighs about 100 tonnes.



### Ship

The challenge of a ship is not its weight but the fact that the bridge needs to open and close using hydraulic components. A ship must not touch the bridge at any point.



### Storms

Strong winds can be dangerous for any bridge. Their force can vary between 1 and 5 with wind speeds of up to 300 kph being simulated.

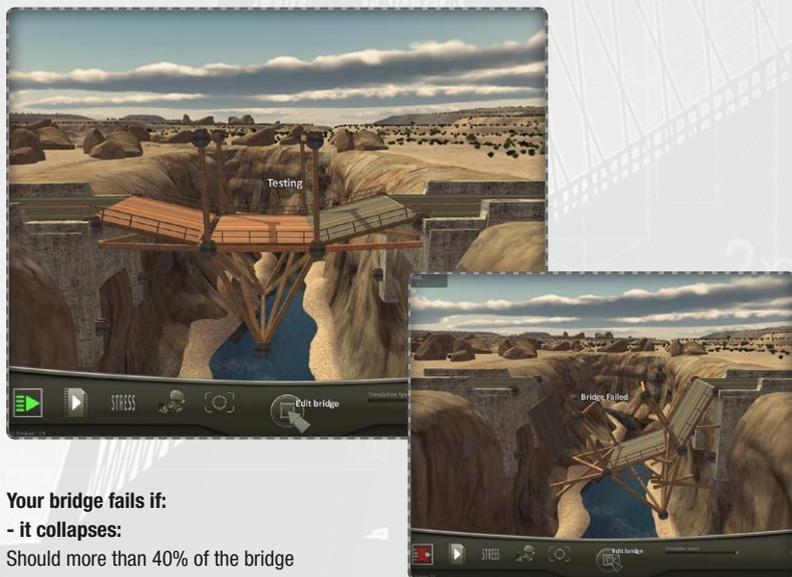


### Earthquakes

Earthquakes affect not only the foundations of a bridge, they also have a negative impact on all its components. They exert a significant amount of stress on your bridge, and their force can vary between 1 and 5.

## 10.4 Failure

If your bridge undergoes the official test and collapses, the construction has failed. In this case you will need to rethink the construction and change the design and materials used.



### Your bridge fails if:

#### - it collapses:

Should more than 40% of the bridge components break, the construction has failed.

#### - a vehicle cannot cross:

Vehicles must not take damage when crossing the bridge. If a vehicle falls into the water or leaves the deck, the construction of the bridge has failed.

If your bridge passes all tests, it is approved and a new map will be unlocked.

## 11. OPTIONS MENU

In the options menu you can change the game's configuration.

You can change the following settings:



<b>Graphics quality</b>	Fast: best performance Medium: good quality Best: all effects
<b>Vegetation</b>	The less vegetation, the smoother the game runs.
<b>Music volume</b>	Sets the music volume
<b>General volume</b>	Sets the volume of all sounds.
<b>Grid transparency</b>	The grid can be displayed with different degrees of transparency.
<b>Automatic cameras</b>	Automatic cameras are the default setting during the simulation. When this option is disabled, you can choose the camera views individually.
<b>Camera shake</b>	The camera will shake with vibrations from breaking components and earthquakes. Here you can enable or disable this option.
<b>Highlight Broken components</b>	When bridge components break, they are displayed in red for one second. Here you can enable or disable the display of components in red.
<b>Daytime simulation</b>	Here you can enable or disable daytime simulation. If daytime simulation is enabled, the lighting and shadows will be dependent on the time of day. With the "+" and "-" buttons you can increase and decrease the hour.

1	Senkschraube
1	Federring A 10
1	Zylinderschraube M12x30
1	Platte

20	ISO 2009	5.8
19	DIN 128	FSF
18	ISO 1207	5.8
17		GG 150

## 12. INFORMATION MENU

When you open the information menu, you will be provided with information about your current bridge.

The properties of the bridge will be shown in a summary: Map type, length and budget of the bridge, weight and length of the deck, information about construction materials, connections and total cost, the total weight and the overall structure. The current map record is also displayed along with the required official tests.



## 13. RECORDS AND POINTS

If the bridge passes all the official tests, the map is complete and you are awarded points. The points awarded for a map, or rather for the bridge on the map, depend on the following factors: budget of the bridge, complexity of the map, number of bridge components and total weight of the bridge. When all maps have been completed, the total of the points from each map makes up the player's overall rank.

Records for individual maps are also saved and make up the global leaderboards for the different maps. Apart from the ranking for all factors, you can also display the rank for individual factors, such as the rank for budget, bridge component or total weight. This allows players to compare themselves with other players all over the world. There is also a local leaderboard, which only contains the players' individual scores so they can compare their progress from previous games.

To compare your records with other players you have to be connected to the Internet.

### Hint:

Further improve your successful bridges in expert mode to reduce the number of components used. This will lead to a better ranking in the online leaderboards.

## 14. MAP EDITOR



The map editor, which you can access from the main menu, allows you to create new maps and challenges yourself. Shape mountains, plant trees and decide where the bridge will be built, which materials are available and which official tests the bridge needs to pass.

After starting the map editor, you can choose whether to create a new map or load a previously saved map. You can save an unfinished map any time and load it later to continue working on it.

First you can choose four basic parameters:

**Ground level:** The ground level defines the altitude at which the bridge will be built.

**Water level:** Defines the water level, which needs to be lower than the ground level on which the bridge deck will be built.

**River width:** Sets the width of the river which the bridge will need to span, therefore defining its length.

**Base texture:** The map will be created using the selected base texture.



In the map editor, you can freely position the camera using the controls mentioned above.

### Brush



In the lower part of the screen you will find a selection menu. There you can choose the "brush". Using this brush you can make changes to the map. You can adjust its width and size use it to modify the map.

Using a big brush with a large width, you can quickly create big depressions or mountains. Using a small brush with a small width, you can make more precise modifications.



## 14.1 Tools

Apart from the brush you also have other tools at your disposal:

### Paint



Any location of the map can be painted with one of the available textures. The resulting changes depend on the selected size and width of the brush.

The brush size defines the painted area and the brush width defines the transparency of the applied texture.

### Height



Using this tool, you can modify the height of the landscape. As above, the properties of the brush influence the resulting changes. Left-clicking with the mouse will raise the landscape. Holding the Shift key pressed while left-clicking with the mouse will lower the landscape.

### Fixed heights



Using this tool, you can create level planes (left-click with the mouse) and, as above, the properties of the brush influence the resulting changes.

### Trees



By selecting trees, you can place them with a left-click. Left-clicking while holding the Shift key pressed allows you to remove trees. The properties of the brush define the number of trees.

### Buildings



For buildings, you can choose from two different categories. There are rural and urban building types at your disposal. Of course, you can use both building types in the same map. First, choose a category and then the desired building by clicking on it.



Choose the building and place it on the map. In this case, the properties of the brush have no effect! You can place a building with a left-click and remove it with a right-click. You can rotate a building by holding the left mouse button pressed and moving the mouse,



This way, you can place any number of 3-D objects on the map, but please note that placing too many objects increases the required performance of your computer. You cannot place any objects in the area of the standard road. This will be indicated by a red box that appears when you try to place a building in this area. This applies only to the standard road and not to the road texture you may have added afterwards.

#### TIP:

Place the larger buildings and the objects that need most space first. This helps you divide up the map better. Don't forget you can rotate objects so that they all line up nicely.

## Accessories



The “Accessories” group of objects contains fences, road signs, transmission towers as well as several other small objects for decorating your map. It is best to use them once all buildings have been placed.

### TIP:

You can place the same building more than once on a map. Rotate the object to create some variety..

## Anchor points



Here you can set the anchor points for the construction of your bridge. One fixed anchor point will be set on either side, but you can set additional anchor points with by left-clicking. You can remove anchor points with a right-click.

### TIP:

Visit [www.bridgeproject-game.com](http://www.bridgeproject-game.com)

There, you will find maps made by other players. We recommend compressing any map you want to exchange into a ZIP file.

Maps can be quite large and so turning them into a ZIP file will save transfer time.

Please remember that ZIP files must be unpacked before using them in Bridge Project. Maps still in ZIP files will not be recognized.

## 14.2 Sky and lighting



Here you can define the appearance of fog and the sky. With the ambient and fog colour, you can create lighting and mood effects. Using these options, you can create atmospheric maps that feature day and night time.

## 14.3 Material lists and tests in the game



### Available materials

The amount and types of materials that are in the map can be set in this menu. In the game, the player can then use only certain amounts of the selected materials.

When testing your bridge, you can always adjust the material amounts here.



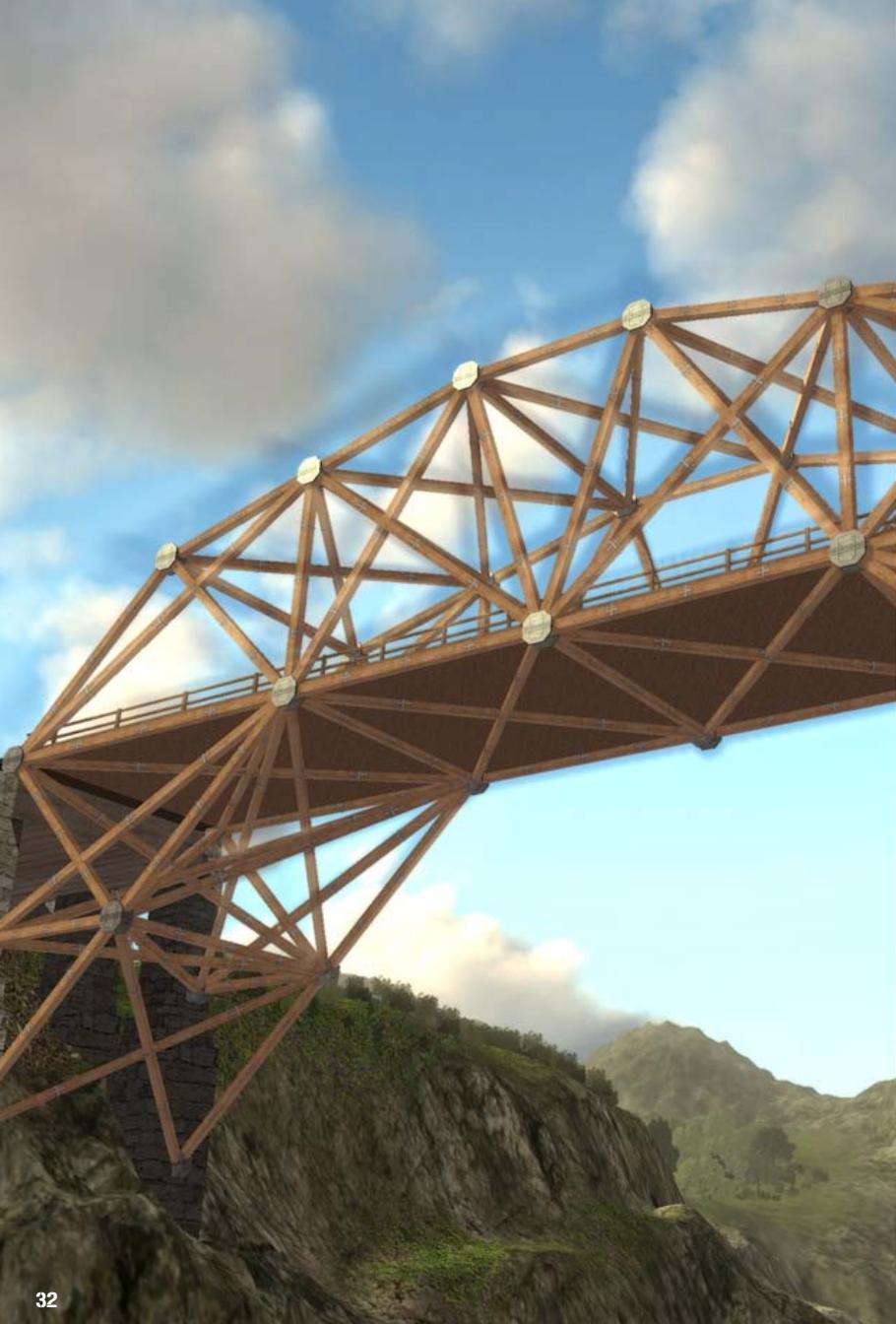
### Defining bridge tests

In the last step you define the official tests that the bridges are required to pass after their construction. You can choose different vehicle types and their amounts as well as natural events such as wind, storm and earthquakes.

As with the selection of material, these settings also directly influence the game.

### TIP:

Start with a high amount of material. Try your map out and see if you can build a great bridge. Then you can reduce the amount of material and try again. Repeat until you come up with a challenging - but achievable – map.



## 15. SUPPORT

Due to the great number of potential hardware and software combinations, in some cases technical problems may occur when using our software.

Please make sure to use the latest graphics and sound drivers. Start the installation and run the setup file with administrator privileges. If you do not have administrator privileges, errors may occur while files are being written to the hard disk. You can prevent this by right-clicking the setup file and choosing "Run as administrator" from the menu.

You can check the FAQ section at [www.halycon.de](http://www.halycon.de) to see whether a problem is already mentioned. Most problems have already been encountered and listed here, together with an explanation or troubleshooting tips.

If you do not find a solution here, you can easily use the contact form on the website to get in touch with us.

Please include a detailed description of the problem and, if applicable, the DirectX log file in your message so we can help you as quickly as possible. The log file contains all driver-specific information we require.

Using Windows you can obtain this file with the programme "DXDIAG".

You can start "DXDIAG" as follows:

- 1) Click [Start] in the task bar and select [Run...].
- 2) Type "DXDIAG" (without quotes) and click [OK].

The programme will start and you can view all required information or save them to a file.

**HINT:** Register your product on the MyHalycon website. You will receive free notifications on updates, patches and add-ons for your programme.

20	ISO 2009	5.8	
19	DIN 128	FST	
18	ISO 1207	5.8	
17		GG 150	

## 16. PRODUCT REGISTRATION WITH HALYCON MEDIA



You can register this add-on and other Halycon software for free on [www.halycon.de/myhalycon](http://www.halycon.de/myhalycon) in the “MyHalycon” section.

When using registering your Halycon products for free, you will receive great benefits. You will be notified when new add-ons, improved versions and goodies are available. You receive free access to additional content as soon as it is available at Halycon and you will be entered in our regular raffles. Further features are in preparation... so we have some more surprises in store for you.

You only need a username and a valid email address.

Please note that any serial number can only be registered once. Please do not share your personal serial number with anyone.

**We hope you thoroughly enjoy MyHalycon**

## 17. CREDITS

### Halycon Media GmbH

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You can find more information on [www.halycon.de](http://www.halycon.de) or on the Bridge Project website [www.bridgeproject-game.com](http://www.bridgeproject-game.com)

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