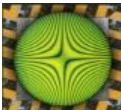# RoboFactory Board Element Rules V1.0

Alternative Ground Plates

They may look different, but these are just normal squares and they do not affect robots at all. Treat them as open ground (as long as there is no crusher on them).

Antigravity Field

Function: Robots starting their move on Antigrav Fields begin to soar. The robot is flying for the rest of the whole turn. A robot lands after the fifth register phase - or immediately if he receives a point of damage.

Timing: Antigravity Fields only operate for robots that are on them **at the start of the turn** and their effects continue through all 5 register phases.

Balancing Platform

Function: Platform slopes under load, causing robots to slide off the platform to one side. The platform is divided into 5 areas (shown here by red lines, on the board by the little golden bullets). On the outer 4 areas, robots cause the platform to slope down to that side of that platform.

In the picture, there are 2 robots in the left area of the platform plus one bot in the right, one bot in the center and one in the top area. So the platform slopes to the left, all 5 bots slide one square (without rotating) in the direction indicated here by the green arrows. Robots sliding off of the platform (the bot with the white X on it) do not take damage.

Timing: At the end of the Robots move-Sequence (BEFORE belts, pushers, gears,... move!)

Big Trapdoor

Function and Timing: Like a normal trapdoor pit, only 4 times as big!

Big Turning Gear

Function: This big gear with a wall in the middle works like a secret door. As long as robots stand on the gear, it turns 180° every register phase. (So yes: Robots looking to the wall still look against it after the gear has turned).

Timing: Just after the little gears turned 90° in the Board Elements move-Sequence.

Black Hole

Function: Black Holes attract everything, especially moveable objects like robots! All robots in a straight line with the hole get pulled one square closer to the void. The hole affects the whole board, so it´s range can be up to 11 squares, even through walls! (though robots cannot be pulled through walls). Treat the square containing the black hole itself as a pit/drain.

Timing: Effect occurs right before gears start to turn.

Blaster/Melting Beam

Function: This hi-energy beam immediately is always active and starts to melt any robot passing through it and/or ending a register phase on it. Like a flamer, it is active all 5 register phases and robots can get 1 or 2 point of damage. The first point of damage always locks the robot´s current register!

**Timing:** Simultaneous to active flamers.

Bridge

Function: Open bridges are treated as holes and robots cannot pass over them unless they are closed. In the register phase(s) indicated by the numbers on the bridge it closes and is treated like solid ground for that register phase. Bridges are treated like a pit on register phases that they are open.

Timing: Bridges open/close at the beginning of the appropriate register phase indicated by the number(s) listed on the bridge.

Crossgear
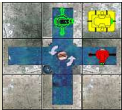
Function: Rotates 90° based on the arrows and changes the orientation of the robot. In the picture, the red SpinBot is looking south, after the crossgear rotated, he will be moved diagonally and end up looking east (marked here as a 'virtual' green SpinBot). TheYellow robot is not affected in any way by the Crossgear itself - other than it now gets a p.o.d from the laser shot of SpinBot which is now pointed at it.

Timing: Occurs right after both the little gears (90°) and the big gears turned (180°) in the Board Elements move-Sequence.

Copy Machine

Function: By pushing the red button (running against it) start the machine. It produces a "Tamagotchi", a virtual copy of your robot, on the antenna-side of the wall. Put the virtual plate of your robot on the square facing towards the wall. The Tamagotchi dissapears when it touches the copy machine on his side at the square he arose. If either the tamagotchi or the robot get killed, both die immediately. Treat the Tamagotchi like a virtual robot in every way.

Timing: The machine can be activated in the Robots move-Sequence.

Crumbly Ground

Function: Robots can either move over the Crumbly Ground or stop and continue moving past it in the next phase/turn. Robots trying to execute a rotate card on the Crumbly Ground (in essence staying in place on the square for a complete register phase) sink in and lose one life.

If you want to make things more tricky, you can keep a couple of pit-tokens beside the board and put one on each Crumbly Ground, after a robot breaks through it - adding more and more pits to the board during the game!

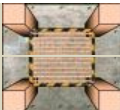**Timing:** In the reveal program cards sequence.

Deep Water
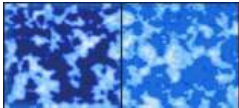
Function: Both pictures show deep water on the left square, 'ordinary' water (with current) on the right square. Functions like normal water, but robots standing in or moving through deep water take 1 point of damage.

Timing: Like normal water.

Elevator

Function: On the indicated register phases, the elevator is in his up-position, otherwise it is on ground level. In both cases, treat him like a normal ground square. When the elevator is up, robots can stand under it or move through the square. But when the elevator comes down, it has a crusher-like effect on robots under it!

Timing: When the elevator is up, robots can stand under it or move through the square it occupies, but when the elevator comes down, it will crush any robots under it.

Energizer

Function: Robots ending their move on an energizer square get energized. In subsequent phases, they execute their program cards in double speed. Priority of cards gets overridden by order of registers. After the robot ran out of programmed cards, he executes his program starting with register 1 again, until the end of the whole turn.

(Example: A robot hits the Energizer in Phase 2. On phase 3, he would execute his phase 3 AND phase 4 movement cards. On phase 4, he would execute his phase 5 card and then start again with his phase 1 card. In Phase 5 he would execute his phase 2 and phase 3 cards a second time.)

Timing: Energizer is active in all 5 register phases. Effect on robots (once they are energized) occurs in all remaining register phases of the current turn.
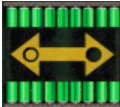
Fast Ramp

Function: The blue belts move the robot up the ramp to the next level in the Board Elements move sequence.
Timing: During Blue Conveyor Belt movement.

Flip (Green) Conveyor Belt

Function: Moves robots one square per register phase, but in different directions. If one or more robots moved through a Light Barrier in the current register phase, the flip belts move in the opposite direction than last register phase. If a Light Barrier is interrupted constantly by a robot ending its move in it (or turning, ...), the Flip belts do not move at all! They start again, when all Light Barriers are free again (of course in the opposite direction they ended one or more register phases ago). No single Light Barrier controls a certain belt.

Timing: AFTER all other belts in the Board elements move-sequence.

Fog

Function: Fog blocks robots LOS because they cannot see robots on the other site of the fog and therefore they don't fire weapons on them. A robot standing in a foggy square has no LOS at all (never fires). Fog doesn´t effect robots (or drones,...) movement.

Timing: Occurs when a robot moves into the foggy square or has a LOS at it (not through it).

Force Field / Energy Wall

Function: Blocks robots' movement like a wall, but allows robot-mounted weapons to shot through (but not options like drones,...)
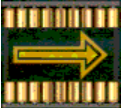
Timing: Always - it's a wall basically.

Ghost

No Image

Function: Ghosts aren't really board elements and they move around like drones. They are impersonated by unused virtual bot-tokens (so there can be up to 8 ghosts in play). Every time a robot enters a board with Graves on it, a ghost appears on the grave closest to the robot. Ghosts move by executing the players discarded program cards in a random order.

As a ghost receives a maximum of 3 program cards from its 'parent' robot, ghosts always stand still in register phases 4+5. If a robot has 4 or more points of damage, his ghost doesn´t move the whole turn. Ghosts are treated like virtual bots, they cannot be pushed or shot but are blocked by walls! In addition, ghosts hover, and they aren´t affected by belts, gears or pits, but ghosts can be destroyed by daylight! When a ghost passes the thick walls and leaves the dark area of the board, it is removed from the game. A robot, that moves through a ghost (or vice versa) or ends its move in the same square as a ghost, takes 1 point of damage.

Timing: Determined by Robot movement.

Golden Conveyor Belt

Function: Transports robots as usual, but moves three squares per register phase.

Timing: First square before all other belts, second square contemporaneous with the first square of the blue belt, third square contemporaneous with blue belt´s second square and the first and only square of the red belt.
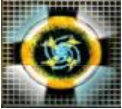
Grave

Function: Robots ending their move on a grave take one point of damage. Graves are also the starting squares for Ghosts.

Timing: Occurs every register phase in the Resolve Laser Fire Sequence (D).

High Power Teleporter

Function: Just in case you play with the rule, that the original teleporters do NOT teleport robots through walls, the high-power teleporters always do!

Optional rule: These High Powered Teleporters move any robot executing a movement card while on it 3+ the value of the movement card (determined the same as with standard Teleporters.

Timing: Simultaneous with normal Teleporters.

Hydraulic Pusher

Function: Pushes one or more robots untill they hit a wall or leave the board the Hydraulic Pusher is on (so your robot could get moved up to 12 squares max). Like ordinary pushers, it does not damage robots.

Timing: In active register phases (indicated by the numbers) in the Boards elements move-Sequence.

Ice

Function: Ice squares cause robots to slide according to their kinetic momentum. Once a robot enters the frozen area, place its virtual token in the middle of the spin chart. Until the bot leaves the ice, always execute the program cards on the spin chart. The real robot then moves according to the summed-up move on the spin chart (always execute the movement part first, then the rotation!). A robot´s move is finished, when he leaves the ice, the rest of the move/momentum is lost. *On the Spin Chart, the robots movement momentum is shown by the bot´s distance to the center of the chart, the spin momentum is shown by the direction it is facing.*

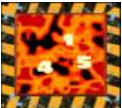**Timing:** Effect occurs as long as the robot is on frozen squares.

Jack In The Box

Function: Slings a robot 6 squares away in a direction indicated by the numbers. In the fifth register phase, the robot is catapulted straight up and lands on the same box/square again. *Optional: The robot receives 2 points of damage due to the rough landing (comparable to the Big Jet-option).*

Timing: Jack pops out in each and every register phase in the Board elements move-Sequence.

Lava Pit

Function: Hot lava erupts from the depth of these pits and damages robots.Robots in the 4 adjacent squares around the pit receive 1 point of damage. *EXPERT RULE: The lava damages robots in all 8 squares surrounding the pit.*

Timing: Lava bursts out in the indicated register phases in the Robots move-Sequence.

Light Barrier

Function: Change the direction of the Flip (Green) Conveyor Belts. If one or more robots moved through a Light Barrier in the current register phase, the flip belts move in the opposite direction than last register phase. If a Light Barrier is interrupted constantly by a robot ending its move in it (or turning, ...), the flip belts do not move at all! They start again, when all light barriers are free again (of course in the opposite direction they ended one or more register phases ago). No single light barrier controls a certain belt. A Light Barrier is not a Laser and robots remain unharmed in any way when moving though or ending a move in a Light Barrier.

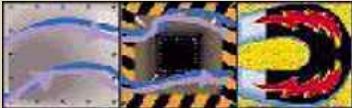**Timing:** Whole turn (all five register phases)

Loophole

Function: These work exactly like ordinary walls except that robots can shoots weapons through them. They do not block any robot-mounted weapons (unlike force fields / energy walls), only a robots movement.

Timing: Always - it's a wall basically.

Magnet

Function: Pulls all robots, that are in a straight line with the Magnet one square closer (and into the pit). Pulled robots don't rotate.

**Timing:** Occurs in the board elements move sequence (C) after the belts moved, before the gears turn.

Mag-Lock

Function: Robot moving onto or over an active MagLock end their movement and loose any remaining motion. Robots on an active Maglock cannot move, programmed movement card(s) are ignored. Locked robots cannot be pushed and are not considered to be flying. If a robot is pushed onto an active MagLock it is locked and cannot be pushed any further. A locked robot may still use any weapon or any other option cards except cards that enable the robot to move away from the MagLock.

Timing: Occurs during the Robots Move segment of the register phase.

Mirror
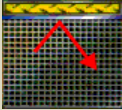
Function: Robots execute their program mirrorwise, as long as they are looking into a mirror (no matter what the distance is). *Rotate right becomes Rotate left, Back-up becomes a Move 1 (foreward) and a Move 3 becomes a tripple Back-up! Only U-turns remain the same.*

Timing: Effect occurs in all Robots move-Sequences in which the robot has a mirror in his LOS (so your robot may be pushed by another robot with a higher priority move, and suddenly your robot has a mirror in his LOS and suddenly executes his program cards in reverse!) If you still look into the mirror in the Resolve Laser-fire Sequence, your robot fires at his own mirror image and the mirror reflects this shot to YOU for 1 point of damage.
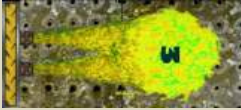
Molten Ore Flow
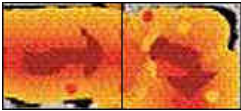
Function: Flowing Molten Ore transports robots exactly like water currents do, but a robot that ends its move in a Molten Ore Flow takes 1 point of damage.

Timing: Occurs in the Board Elements Move-sequence (C) simultaneously with currents.

Napalm Flamer

Function: Napalm Flamers work exactly like ordinary flamers, but robots keep on burning and receive 1 point of damage at the end of every subsequent register phase until they step into or move through a Puddle or water space. If an already burning robot steps into or through another Napalm Flamer, the damage adds up - i.e. the robot would receive 2 damage markers each register phase.

Timing: Like original flamers.

Padded Squares & Walls
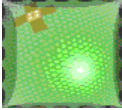
Function: A robot ending his move on a rubber square cannot stop immediately, as it's movement continues by bouncing again the amount of squares he just moved (unless he hits a hard wall or normal ground). With a Move 2 he would move 4 squares (2 for the card and an additional 2 for the Padded Square) with the priority remaining that of the Move 2. Robots also standing on rubber squares are pushed along with him. Robots moving/bouncing on rubber squares and hitting a rubber wall move into the wall and then bounce back on the square they came from. This counts as a 1-square-move! The rest of his move the robot would be bouncing backwards away from the wall

Timing: Affects robot movement in the Robots move-Sequence.

Particle Accelerator

Function: The Particle Accelerator Ring accelerates every atom of a robot and can be quite difficult to manuever through. For each robot that enters the Particle Accelerator, follow this proceedure: At the end of the first register phase, the robot is moved 1 square Clockwise following the blue line it is resting on. If at the end of the 2nd register phase, the robot is still in the Paricle Accelerator, then the bot gets moved 2 squares - adding 1 additional square each subsequent register phasethat the robot remains in the Particle Accelerator.

After 10 phases (2 complete turns), robots would be moving 10 squares in a circle around the Particle Accelerator which is the maximum speed a robot can take! For every register phase following in which the robot remains in the Particle Accelerator, (in which it doesn´t manage to get out of the ring), it´s still moved 10 squares and takes 1 point of damage. A robot is only considered in the Particle Accelerator if it is on a blue line and the blue lines DO move the robots diagonally. Robots are NEVER rotated by the Particle Accelerator - do not change their facing!

We keep track of each robots´ the actual acceleration by giving the player face-down damage tokens. When he has 10 (indicating max speed), the player doesn´t receive any more tokens, but instead, he flips one over every subsequent register phase indicating real damage adding it to any he may already have.

Timing: Acceleration kicks in right at the beginning of the Board-Elements-Move-sequence (C), before all kinds of belts,etc. move!

Piston

Function: Pistons have two positions: up or down. All pistons of the same color always move into the same position. A down piston is treated like normal ground. A robot entering a square with an up piston pushes it down, forcing pistons of the other colour to move up! A robot in a square with a piston that was just raised up, slides down into an adjacent square in the direction indicated by the arrow on the piston (without rotating of course), which, most likely will (and is designed to), happen several times during one register phase!

Timing: Happens on the fly during robot- and board elements move-sequences!

Puddle
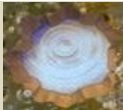
Function: Puddles are too shallow to slow down robots´movement like water. They only affect robots that are burning (such as from a Napalm Flamer), which then get extinguished as they mpve into or through a puddle.

Timing: Always

Radio Beam

Function: Robots moving into or through a Radio Beam receive a remote move, which they have to use in their program for the next turn. Robots do not get damaged by Radio Beams (but can receive up to 2 remote programs per register phase). The remote program is changed randomly every turn. (ORIGINAL TEXT)

REVISED RULE: At the beginning of any turn where there are no facedown cards set up for the Radio Beam, lay out 3 Program Cards (facedown) in order near the board where the Radio Beam is located. Any robot stopping or moving through the Radio Beam finishes it's movement for that register phase and then discards any remaining Program Cards (if any) and must execute the 3 Program Cards dealt to the Radio Beam instead of it's program. The Radio Beam program cards are turned up one by one in each subsequent Register phase. ALL facedown Radio Beam Program Cards must be carried out if a robot is affected by the Radio Beam. This means that a robot entering the beam in Register 5 would then be moved 3 additional times after all other robots have moved - creating a register 6, 7 & 8 for this turn only. Robots fire their lasers and may still use any options that do not affect movement during these 3 additional moves. Conversely, a robot entering the Radio Beam during the 1st register would only move a total of 4 times instead of 5 (1 + the 3 from the Radio Beam).

**Timing:** Like flamers, but active in all 5 register phases.

Repeater

Function: A robots ending their move on a Repeater must execute its current program card once again, if it is a MOVEMENT card (Move 1, 2, 3 or Back up). If several robots are repeating their movement cards, they are executed in normal priority order. If the repetition let robots end on another Repeater, another round of repeated maneuvers will occur.

Timing: Occurs after the Robots Move segment before entering the next segment (and until no robot with a movement card in its active register is on a Repeater).

Reset Site
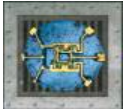
Function: Like on Repair sites, robots can store there archive here, but may not repair or exchange/gain options. In addition, at the end of phases 1-4, the robot may choose to replace his next programmed register (#'s 2-5) with a card of his choice that is still in his discard pile. A robot ending on a reset site at the end of the fifth register phase gains one program card **of his choice** for the next turn. This card of his choice replaces one of the cards normally dealt to him so an undamaged robot for example, would receive 8 dealt cards in addition to his free choice card.

**Timing:** Always (like Repair sites and Chop shops).

Rotating Conveyor Belts

Function: Every register phase, these belts rotate in position indicated by the numbers on the belt. Then they behave exactly like the normal belts of their colour. The arrows are used to visualize the various directions, the belt may move to, the actual direction changes each register phase.

Timing: Belts rotate in position at the beginning of the Board Elements Move-Sequence.
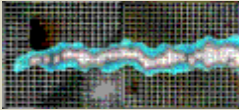
Rotating Room
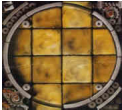
Function: This time, the entire room rotates 90° clockwise every turn. Rooms without robots in them do not rotate!

Timing: Rotation takes place in the End-of-Turn-Sequence.

Sporific Gas

Function: A robot ending his move in a soporific gas cloud immediately falls asleep. While sleeping, treat him as powered down (regenerating damage).The robot keeps his unexecuted movement cards of the current turn, because after five register phases he awakes (more or less) refreshed to execute the rest of his program. *A robot ending in the Sporific Gas cloud after the second register, wakes up in the third register phase of the next turn and executes his third, fourth and fifth program card (remaining from the previous turn) like nothing had happened - except that any damage he had is removed (however any damage taken while asleep remains).*

Timing: Affects robot movement in the Robot move-Sequence (in several turns).

Sluice

Function: Sluices have 2 states-open (in the picture) and closed. Open sluices can be treated like open ground. Robots trying to move onto an open sluice from the upper level fall down, taking two points of damage) In the register phases indicated by the numbers on the Sluice, it is considered closed and it can be traveled across like open ground on the upper level (and behaves like a solid wall on the lower level). Robots standing on the sluice square when it closes get killed immediately!

Timing: The sluice changes its state after program cards are revealed before (!) robots move.

Smoke

Function: Smoke blocks robots LOS (like fog) and since they cannot see robots on the other site of the Smoke, they don't fire weapons on them. A robot standing in a Smoke square has no LOS at all (so it never fires). Smoke doesn´t effect robots or drones movement.

Timing: Occurs when a robot moves into the smoke square or has a l.o.s. at it (not through it).

Smokestack

Function: Smokestacks are treated like ordinary pits. Smokestacks emit smoke. Robots equipped with the tip-toe-legs option can enter squares with smokestacks without falling in!

Timing: Always (it´s nothing but a bottomless pit).

Soap

Function: Robots standing on soap will have their rotate cards doubled. (U-Turns become 360s, normal rotate cards become U-Turns). Robots executing Movement cards on soap will have their first square of movement negated.

Timing: Always.

Spikey Wall

Function: Robots running (or being pushed) against a spikey wall receive one p.o.d.

Timing: Always.

Start

Function: Defined and numbered starting positions for Race Track-boards (and the Arena 2000-board). After the race started, treat the square as a normal ground square.

Timing: At the very beginning of the game.

Tamagotchi

No Image

Function: Tamagotchis aren´t really board elements, they move around like drones,etc. They are impersonated by the robots virtual bot-tokens. Every time a robot uses a Copy Machine, a Tamagotchi appears. Tamagotchis are treated like virtual bots. They move by executing the players program cards of the real bot that they belong to. Tamagotchis cannot archive, but can tag flags, gain options, ect... *If either the Tamagotchi or the robot gets killed, both die immediately!*

Timing: Dependent on Robot movement.

Tilted Ground (Sand)

Function: Every robot attempting to end its move on the Sand slips down one square (without changing the direction he is looking in) In the corners of the crater, the robot slips down diagonaly.

Timing: Affects robot movement in the Robot move sequence as well as in the Board elements move-Sequence.

Trapdoor

Function: The figure indicates the number of robots, the trapdoor can carry (in its 4 / 9 squares). If one more robot tries to end his move on it, he sets of the trapdoor: It immediately opens (killing all other robots on it) and the robot ends his move being the only one on the (again) closed trapdoor. Trapdoors can open/close several times in one register phase depending on the robots moves and their priorities!

Timing: May occur in the Robots move-Sequence as well as in the Board elements move-Sequence.

Turret

Function: Turrets are little weapons rising in the center of a pit. They can rotate or shoot. After program cards are dealt, pick 5 of the unused cards at random to determine the behaviour of all turrents on the board. Rotate cards cause the turrets to rotate, there is a special token to keep track of the turrents´current position. A move card causes the turret to fire a (normal) laser beam. Robots trying to enter a turret´s square fall into the pit. In all other aspects, turrets behave like a wall: they block robots´ l.o.s. and weapons, they cannot be destroyed or moved.

Variant Rule: Turrets are armed with either Tractor and Pressor Beams instead of ordinary lasers. A movement card causes them to push robots a number of squares equal to the number on the movement or to pull the robot 1 space closer towards the Turret if a "Back-Up" card is played.

Timing: The program cards for the turrents are revealed along with the players´cards. The turrents then either rotate in sequence C when the gears rotate or shoot in sequence D simultaneous to the board-mounted lasers.

Ventilator

Function: Every robot ending its move in the line of a ventilator, gets blown away. The number of squares it is moved is equal to the number of ventilators that are connected in parallel (1 to 3).

Timing: Ventilators are active in the indicated register phases in the board elements move-sequence.

Waterfall

Function: Waterfalls move robots like other currents but they also transport the robot down one or more levels. For every level a robot falls down, it takes 2 points of damage.

Timing: Occurs in the Board-Elements_move-sequence (C) simultaneously to the currents.

Players wishing to play on factory boards using these board elements should go to **www.roborfactory.de** *where there are over 75 boards available for download. All images are taken from that site and the rules posted there have been formated, corrected and clarified in this document where needed. In instances where the original rules were unclear as to how a board element works, I have offered a variation. There are sample images of many of the boards from www.robofactory.de in the Roborally image gallery, but those images are NOT large enough to make usable player boards and players must go to that site in order to use any of these boards. This file is simply a printable reference as to how the new board elements work as none was ever added to* **www.robofactory.de** *for download. Hope you enjoy!*