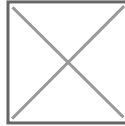


Q&A

VRC 2019-2020: Tower Takeover

Tagged: Scoring



Welcome to the official VEX Robotics Competition Question & Answer system, where all registered teams have the opportunity to ask for official rules interpretations and clarifications. This Q&A system is the only source for official VRC Tower Takeover rules clarifications, and the clarifications made here from the Game Design Committee (GDC) are considered as official and binding as the written [Game Manual](#) itself.

Please review the [Q&A Usage Guidelines](#) before posting. This system is only intended for specific VRC Tower Takeover rules questions.

- For event, registration, or other competition support questions, please contact your [REC Foundation Regional Support Manager](#).
 - For VEX technical support, contact support@vex.com or sales@vex.com.
- For game questions, suggestions, or concerns outside of specific and official rules questions, contact GDC@vex.com.

Index

[When a mobile goal leaves the field during skills?](#)

[AWP & "Contacting" Neutral Zone](#)

[Mobile Goal Branches Becoming Removed from Mobile Goal Bases](#)

[Q&A 878 Follow Up - Rings Scored on Goal Above Branch](#)

[Neutral Mobile Goal Scored but touching outside floor](#)

[Scoring Rings to Earn Autonomous Win Point](#)

[Goals on the platform after the match point value](#)

[What does and doesn't score after 15 second autonomous?](#)

[Upright Mobile Goals Not Counted As Scored in Alliance Home Zone](#)

[Autonomous Scoring](#)

[Mobile Goals not touching tiles do not score?](#)

[Blue/Red Cube Scoring Clarification](#)

[Ball inside cube, both are "out of the field"](#)

[Skills utilization of alliance towers](#)

[Robot Touching Cube on Platform](#)

[Broken cube scored on a platform](#)

[Can robots retrieve objects that fall outside the playing field](#)

[Green cube on platform also resting on a cube outside the Field](#)

[Robot touching placed cubes at the end of a match](#)

[Cube touching score zone, but also on wall](#)

978: When a mobile goal leaves the field during skills?

18-Dec-2021

Referee Decisions Scoring SG9

How should a skills run be scored/referee'd if a robot interacts with a mobile goal that is on a balanced platform and causes it or any other elevated mobile goal to fall over such that its stem extends over the field perimeter and touches the ground outside of the field but the base remains on the platform? We are under the assumption that once a stem touches the ground outside the arena then that mobile goal is considered to have left the field but this may be erroneous on our part.

Appendix B States: **"Please note that all rules from "The Game" section of the manual apply to the Robot Skills Challenge, unless otherwise specified.**

SG9 Keep Scoring Objects in the field. Teams may not intentionally remove Scoring Objects from the field. While Scoring Objects may accidentally leave the field, doing so intentionally or repeatedly would be a violation of this rule. **Scoring Objects that leave the field during Match play, intentionally or unintentionally, will be returned to the field at the location nearest the point at which they exited. Referees will return the Scoring Object to the field when it is deemed safe to do so, at the leisure of the referee.** Minor violations of this rule that do not affect the Match will result in a warning. Match Affecting offenses will result in a Disqualification. Teams that receive multiple warnings may also receive a Disqualification at the Head Referee's discretion. If a Mobile Goal leaves the field, any Rings that were Scored in the Mobile Goal Base, or on Mobile Goal Branches, will be returned to the field in a non-Scored state, on the field tile closest to where they exited.** **Note: During the last 30 seconds of the Match: • Any Scoring Object that leaves the field will not be returned. • If a Scoring Object is leaving the Field (as determined by the Head Referee), but is deflected back into the field by a Drive Team Member, field monitor, ceiling / wall, or other external factor, it should still be considered "out of the field" and removed by a scorekeeper or Head Referee.** If the redirection occurred due to contact with a Drive Team Member, it will be at the Head Referee's discretion whether or should apply.

-Is that neutral mobile goal officially considered out of play once any part of it touches the ground outside of the arena and should be removed and replaced on the nearest field tile, but not within the last 30 seconds of the skills run? OR -Should it remain in place, thus deeming the platform to be unbalanced and disallowing any elevated points to additional goals on the platform? OR -Other?

Thank you for your time and effort to clarify as we prepare to host an event. Apologies if this has been answered elsewhere.

Answered by Game Design Committee

As quoted in your post, all standard gameplay rules apply in the Robot Skills Challenge, unless otherwise specified. There are no Skills-specific rules pertaining to Scoring Objects exiting the field, so you are correct, SG9 would apply.

For more information regarding how to apply SG9 in this case, please see this related Q&A:

<https://events.vex.com/VRC/2021-2022/QA/888>

If this does not answer your question, please feel free to rephrase and re-submit.

961: AWP & "Contacting" Neutral Zone

7-Dec-2021

Scoring

Based on the v2.2 version of the rules. There have been some similar questions asked and answered, but I haven't seen this specific one covered yet. Quoting of definitions and scoring rules, with bolding added for emphasis by myself. My question follows at the end.

Cleared - An Alliance Mobile Goal state. An Alliance Mobile Goal is considered "Cleared" if, at the end of the Autonomous Period, it **is not contacting** its AWP Line **or the Neutral Zone**. See the Scoring Section for more details.

Neutral Zone - The area of the field in which all three Neutral Mobile Goals begin. See rule SG5.

- The Neutral Zone is bounded by the inner edges of the playing field walls, and the single tape lines which run the length of the field.
- The Neutral Zone is defined as the gray foam tiles themselves; **it is not a 3-dimensional volume**.

Table 3 - Autonomous Period scoring (p16) An Autonomous Win Point is awarded to any Alliance that has **Cleared their AWP Line**, and Scored at least one Ring on or in each Alliance Mobile Goal, at the end of the Autonomous Period.

Scoring Notes (p19) 3. A Mobile Goal is considered Scored in an Alliance Home Zone if, at the end of the Match, any part of the Mobile Goal Base is at least partially within the Alliance Home Zone (i.e. **"breaking the plane"** of the Zone).

It's already been asked and answered that if a robot lifts the alliance goal off of the foam tiles, this counts a "Cleared" since it is no longer contacting the autonomous win line white tape on the foam tile. My question relates to the definition of Cleared and how it relates to 'contacting' the Neutral Zone.

Question: If during the autonomous period, a robot lifts the alliance goal that is sitting on the AWL and then ends the autonomous period with the alliance goal fully in the Neutral Zone (but the alliance goal is not 'contacting' the Neutral Zone) is this goal considered "Cleared"?

Follow up: Does the alliance goal have to be considered "Scored" for that home alliance to be considered "Cleared"? IE does "Breaking the Plane" of the alliance home zone come into play at all?

Thank you in advance for your time and any response.

Answered by Game Design Committee

Thank you for quoting the relevant rules/definitions and for the concise/explicitly-worded questions.

Question: If during the autonomous period, a robot lifts the alliance goal that is sitting on the AWL and then ends the autonomous period with the alliance goal fully in the Neutral Zone (but the alliance goal is not 'contacting' the Neutral Zone) is this goal considered "Cleared"?

As quoted in your post, the definition of "Cleared" explicitly refers to contact with the Neutral Zone. Therefore, yes, this would be considered "Cleared".

Follow up: Does the alliance goal have to be considered "Scored" for that home alliance to be considered "Cleared"? IE does "Breaking the Plane" of the alliance home zone come into play at all?

As quoted in your post, there is nothing in the definition of "Cleared" which relates to Scoring or the Alliance Home Zone. So, no, the Alliance Mobile Goal does not have to be Scored in order to be considered Cleared.

943: Mobile Goal Branches Becoming Removed from Mobile Goal Bases

24-Nov-2021

G20 Scoring

Hello there!

This season, Mobile Goal Branch structures will occasionally become disconnected from a Mobile Goal Base [as part of normal \(video 1\) match play \(video 2\)](#). The questions below reference the following scoring criteria, rule, and definition.

Scoring Notes:

1. Rings can be Scored in Mobile Goal Bases, or on Mobile Goal Branches. In order to be considered Scored in either position, a Ring must first meet the following prerequisite criteria:

- Not contacting a Robot of the same color Alliance for which the Rings would receive points
- Not contacting any Field Elements, such as gray foam field tiles, the Platform, or the field perimeter
- Not contacting any Rings which are not considered Scored (i.e. Rings which are contacting a Robot or a Field Element)

2b. To be considered Scored on a Mobile Goal Branch, a Ring must:

- Meet the prerequisite definition of Scored in Note 1
- Also be “encircling” a Mobile Goal Branch
- In this context, “encircling” means that any part of the Mobile Goal Branch is at least partially within the volume defined by the outer edges of the Ring

G20:

Match replays, i.e. playing a Match over again from its start, are at the discretion of the Event Partner and Head Referee, and will only be issued in the most extreme circumstances. Some example situations that may warrant a Match replay are as follows: a. Match Affecting “field fault” issues. iii. Field Elements detaching or moving beyond normal tolerances (Not as a result of Robot Interactions).

Definition of Field Elements:

The foam field tiles, field perimeter, white tape, Platforms, and all supporting structures or accessories (such as driver station posts, field monitors, etc).

G20aiii mentions replays being allowed for Field Elements becoming outside of tolerance. However, the scope of Field Elements does not include a Mobile Goal or its respective Mobile Goal Branch(es) as they are categorized as Scoring Objects. Therefore, the separation of the Mobile Goal Branch(es) from a Mobile Goal Base [as part of normal match play](#) alone does not constitute a replay per G20aiii, even if match affecting, correct?

If a Mobile Goal Branch structure becomes separated from a Mobile Goal Base [as part of normal match play](#), and one or more rings meet the scoring criteria for a ring on a branch (example video 2), any rings on Mobile Goal Branches would be considered scored as there is no requirement the Mobile Goal Branch still be attached to a Mobile Goal Base, correct?

Answered by Game Design Committee

As quoted, G20 notes that the items listed are example situations only, not an all-inclusive list. A Mobile Goal becoming disassembled would be considered an extreme circumstance, and would likely be grounds for a Match replay at the discretion of the Head Referee and Event Partner. (provided, of course, that it was not the direct/intentional result of a Robot action, i.e. a violation of R4 or S1).

In most cases, a Branch being pulled out of a Mobile Goal Base occurs due to the collar underneath the Mobile Goal coming loose or being under-tightened during assembly. Event Partners are advised to check these collars periodically throughout an event to make sure that they have not worked themselves loose due to rough gameplay.

902: Q&A 878 Follow Up - Rings Scored on Goal Above Branch

29-Oct-2021

Scoring

Hello, Thank you for answering [my previous Q&A](#) on this topic.

Unfortunately, upon further review of the rules I believe I made an error in saying that the rings stacked above the end of the branch were not scored.

Scoring Note 2a states:

2a. To be considered Scored in a Mobile Goal Base, a

Ring must:

- Meet the prerequisite definition of Scored in Note 1
- Be contacting either

? The colored portion of a Mobile Goal Base, or

? **Another Ring which is considered Scored in a Mobile Goal Base**

Emphasis mine.

Scoring Note 2c states:

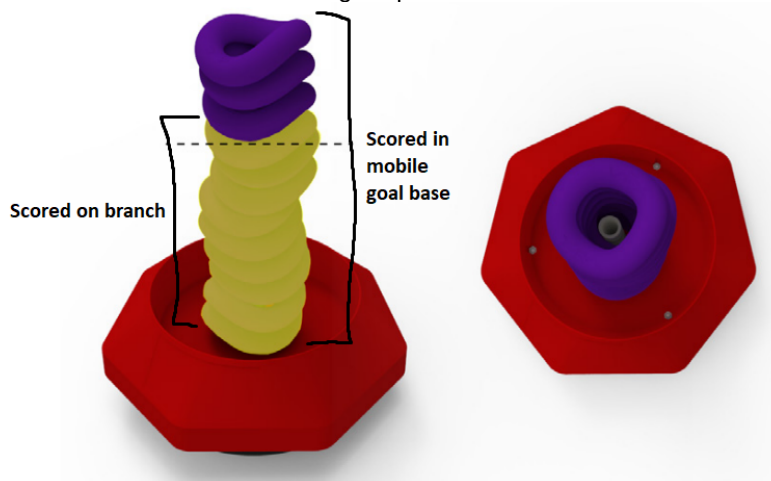
2c. Rings may only count for points once, i.e. in one Mobile Goal Base or on one Mobile Goal Branch.

- If a Ring meets the definitions of Scored for multiple point values on the same Mobile Goal, the highest point value should be used.
- Both of the blue Rings in the figure to the left would be considered Scored in the Mobile Goal Base
- Both of the green Rings in the figure to the left would be considered Scored on the Mobile Goal Branch

It is my understanding that if a ring meets the definition of scored for both a Mobile Goal Base and a Mobile Goal Branch, then it can be considered scored in both ways; however, as Note 2c states Only the points from being scored on a branch would count.

This would mean that in the situation presented in the image, the highlighted rings would all be considered to be scored both in the Mobile Goal Base and on the Mobile Goal Branch because the bottom-most ring is contacting the Mobile Goal Base (though for scoring purposes only points from being scored on a branch would be counted). This would mean that the rings which extend above the highlighted portion would also be considered scored in the Mobile Goal Base, through the above highlighted subpoint of Note 2a. Therefore, because all rings on the picture are actually scored (the bottom 9 counting for 27 points and the top 3 counting for 3 points), no rings would be descored under Scoring Note 1 Subpoint 3.

I have attached an annotated version of the figure presented in the manual to demonstrate what I mean.



Scoring Figure 5: *Only the highlighted Rings would be considered Scored, as they are the only ones fully or partially encircling the Mobile Goal Branch.*

Would this interpretation be correct? I apologize for my possibly incorrect previous question, I should have reviewed the rules more carefully.

Thank you.

Answered by Game Design Committee

Would this interpretation be correct?

No. The interpretation provided in the previous response should be used.

One of the reasons for Note 2c is to cover this specific scenario, i.e. how the bottom-most Ring on an Alliance Mobile Goal should be handled. Since "Scored on a Branch" is the higher point value option, the bottom-most Ring in the attached image should be considered "Scored on a Branch" for all subsequent definitions and interpretations.

888: Neutral Mobile Goal Scored but touching outside floor

20-Oct-2021

Scoring SG9

In two recent events, I have seen the tall neutral mobile goal legally placed on the platform and fall with the branch going outside the field of play - touching the floor outside the field. 1) The first (pictured) was not on a balanced platform, but it technically meets all of the definitions for being scored in the Home Zone (Scoring Notes 3) since the base was in the 3D of the Home Zone. 2) The second (not pictured) was on a balanced platform while not contacting any other Field Elements, such as foam field tiles or the field perimeter. So, again technically meets all of the definitions of being scored and elevated (Scoring Notes 3 and 6 and definition of Balanced).

The common sense rule may come into play since it is touching the floor outside the field of play ... but if that does and you declare the game object outside the field of play, should it be placed back in the field of play (if not within 30 seconds) SG9? And if so, where would you put it as the "the location nearest the point at which they exited" is on the platform?



Answered by Game Design Committee

The full text of SG9 reads as follows:

<SG9> Keep Scoring Objects in the field. Teams may not intentionally remove Scoring Objects from the field. While Scoring Objects may accidentally leave the field, doing so intentionally or repeatedly would be a violation of this rule. Scoring Objects that leave the field during Match play, intentionally or unintentionally, will be returned to the field at the location nearest the point at which they exited.

Referees will return the Scoring Object to the field when it is deemed safe to do so, at the leisure of the referee.

Minor violations of this rule that do not affect the Match will result in a warning. Match Affecting offenses will result in a Disqualification. Teams that receive multiple warnings may also receive a Disqualification at the Head Referee's discretion.

If a Mobile Goal leaves the field, any Rings that were Scored in the Mobile Goal Base, or on Mobile Goal Branches, will be returned to the field in a non-Scored state, on the field tile closest to where they exited.

Note: During the last 30 seconds of the Match:

- Any Scoring Object that leaves the field will not be returned.
- If a Scoring Object is leaving the Field (as determined by the Head Referee), but is deflected back into the field by a Drive Team Member, field monitor, ceiling / wall, or other external factor, it should still be considered "out of the field" and removed by a scorekeeper or Head Referee. If the redirection occurred due to contact with a Drive Team Member, it will be at the Head Referee's discretion whether <G9> or <SG9> should apply.

The intent of the Note's second bullet point is to say that as soon as a Scoring Object makes contact with anything outside of the field, it should be considered "out of the field" and dealt with accordingly.

Therefore, the Mobile Goal in the attached image should be considered "out of the field". If the contact occurred during the last 30 seconds of the Match, it should be removed from the field. If it cannot be removed from the field safely and/or in a timely manner, it should simply be considered "not scored".

If the contact occurred before the last 30 seconds of the Match, then the Mobile Goal should be returned to a field tile closest to where it exited. It should not be returned to a Platform.

838: Scoring Rings to Earn Autonomous Win Point

10-Aug-2021

Scoring

Background:

In the game manual (version 1.1) in the "Scoring Notes" on page 16, it states: "An Autonomous Win Point is awarded to any Alliance that has Cleared their AWP Line, and Scored at least one Ring on each Alliance Mobile Goal, at the end of the Autonomous Period."

The Issue:

The referees at the Benton County Fair Signature Event (RE-VRC-21-4730) interpreted the word "on" to mean "on a branch" so when rings were scored in the mobile goal bases they were not counted as earning the AWP

However, the game video shows at 2:25 the AWP being earned by scoring a ring in the base of the mobile goal (<https://youtu.be/H8XcvADUXTE?t=145>)

Question:

Does a ring scored in a Mobile Goal Base (but not on a branch) meet the requirement for earning an Autonomous Win Point?

Suggestion:

For additional clarity, I suggest the Scoring notes be changed to one of the following:

"An Autonomous Win Point is awarded to any Alliance that has Cleared their AWP Line, and Scored at least one Ring on a Branch or in the Base of each Alliance Mobile Goal, at the end of the Autonomous Period."

"An Autonomous Win Point is awarded to any Alliance that has Cleared their AWP Line, and Scored at least one Ring on a Branch of each Alliance Mobile Goal, at the end of the Autonomous Period."

Thank You.

Answered by Game Design Committee

Does a ring scored in a Mobile Goal Base (but not on a branch) meet the requirement for earning an Autonomous Win Point?

Yes.

Thank you for the clearly written-out and specific question. We will be sure to better clarify this situation in a future Game Manual update.

831: Goals on the platform after the match point value

27-Jul-2021

Scoring



At the end of 2 Minutes: No rings but 2 gold goals and 2 red goals on a balanced red platform not all goals are flat but also not leaning on the field wall Would the points be 160 (40 by 4)?

Answered by Game Design Committee

Please review the [Q&A Usage Guidelines](#) before posting, specifically point 3, "Quote the applicable rule from the latest version of the manual in your question". Often, you'll find that by quoting the rule, you'll answer your own question.

The definition of "Balanced" reads as follows:

Balanced - A Platform state. A Platform is considered Balanced if all of the following criteria are met at the end of a Match:

1. The Platform is roughly parallel to the field.
2. Both flat surfaces of the Platform hinges are contacting the Platform base, as shown in Figure 7.
3. **Robots and / or Scoring Objects contacting the Platform in their Alliance Home Zone are not also contacting any other Field Elements, such as foam field tiles or the field perimeter.**
 - a. For the purposes of this definition, contact is considered "transitive" through other Robots and Scoring Objects. **For example, as shown in Figure 9, contact with a Mobile Goal that is resting on top of the field perimeter would not satisfy the definition of Balanced.**

Note: As stated in rule <G18>, a Match ends once all Robots, Field Elements, and Scoring Objects have come to rest, including Platforms.

Note 2: As stated in rule <SG3>, a Platform which is being contacted by an opposing Alliance Robot at the end of a Match is automatically results in a Disqualification for the opposing Robot and / or Alliance, regardless of the above criteria.

The definition of "Elevated" reads as follows:

Elevated - A Robot and / or Mobile Goal state. A Robot or Mobile Goal is considered Elevated if all of the following criteria are met at the end of a Match:

1. The Robot or Mobile Goal is contacting their Alliance Platform.
2. **The Platform meets the definition of Balanced.**
3. The Robot or Mobile Goal is not contacting any other Field Element, such as the foam field tiles or the field perimeter.
 - a. For the purposes of this definition, contact is considered "transitive" through other Robots and Scoring Objects. For example, as shown in Figure 10, contact with a Mobile Goal that is contacting a field tile would not satisfy the definition of Elevated.

Note: For the purposes of this definition, any Mobile Goals that are in Possession of an Elevated Robot are also considered Elevated. See Figure 11 for more information.

In your question, you state that none of the Mobile Goals are contacting the field perimeter. If this is the case, then all four Mobile Goals would be considered Elevated.

However, due to the viewing angle, it is very unclear to us whether the red Alliance Mobile Goal in the back of the photo is contacting the field perimeter or not. If it *is* contacting the field perimeter, then this Platform would not meet

the definition of Balanced. Therefore, none of the Mobile Goals are considered Elevated. Therefore, all four Mobile Goals are considered Scored in the Alliance Home Zone.

817: What does and doesn't score after 15 second autonomous?

10-Jul-2021

Scoring

See this VEX Forum thread:

<https://www.vexforum.com/t/scoring-after-autonomous-vs-after-the-match-ends/92149>

Based on Q&A 809 (<https://events.vex.com/VRC/2021-2022/QA/809>)

And extrapolation of that "at the end of the match" ruling to all Mobile Goals in the Alliance Home Zone (in "Scoring Notes" on page 17, point 3)

It would seem that only Rings scored on or in the Alliance Mobile Goals will determine the autonomous winner.

Is that true?

Answered by Game Design Committee

When determining the Autonomous Bonus, Mobile Goals and Rings should both be considered Scored at the end of the Autonomous Period exactly the same as they would be at the end of the Driver Controlled Period.

The Platform should not be included in this scoring calculation (i.e. no additional points are received for Elevated Mobile Goals and/or Robots at the end of the Autonomous Period).

We apologize for the confusion & delayed response in answering this question. These clarifications will be included in a future Game Manual Update.

810: Upright Mobile Goals Not Counted As Scored in Alliance Home Zone

13-Jun-2021

Scoring

In version 0.1 of the game manual, row 3 on page 17 of the scoring section defines when a Mobile Goal is considered scored in an Alliance Home Zone:

A Mobile Goal is considered Scored in an Alliance Home Zone if, at the end of the Match, any part of the Mobile Goal Base is contacting the Alliance Home Zone.

The Mobile Goal Base is defined as:

The 7-sided yellow, blue, or red plastic bottom portion of a Mobile Goal with a maximal diameter of 13" (330.2mm).

Figure 15 matches this definition, as the only portion highlighted in green is the colored plastic portion and not the bottom metallic portion.

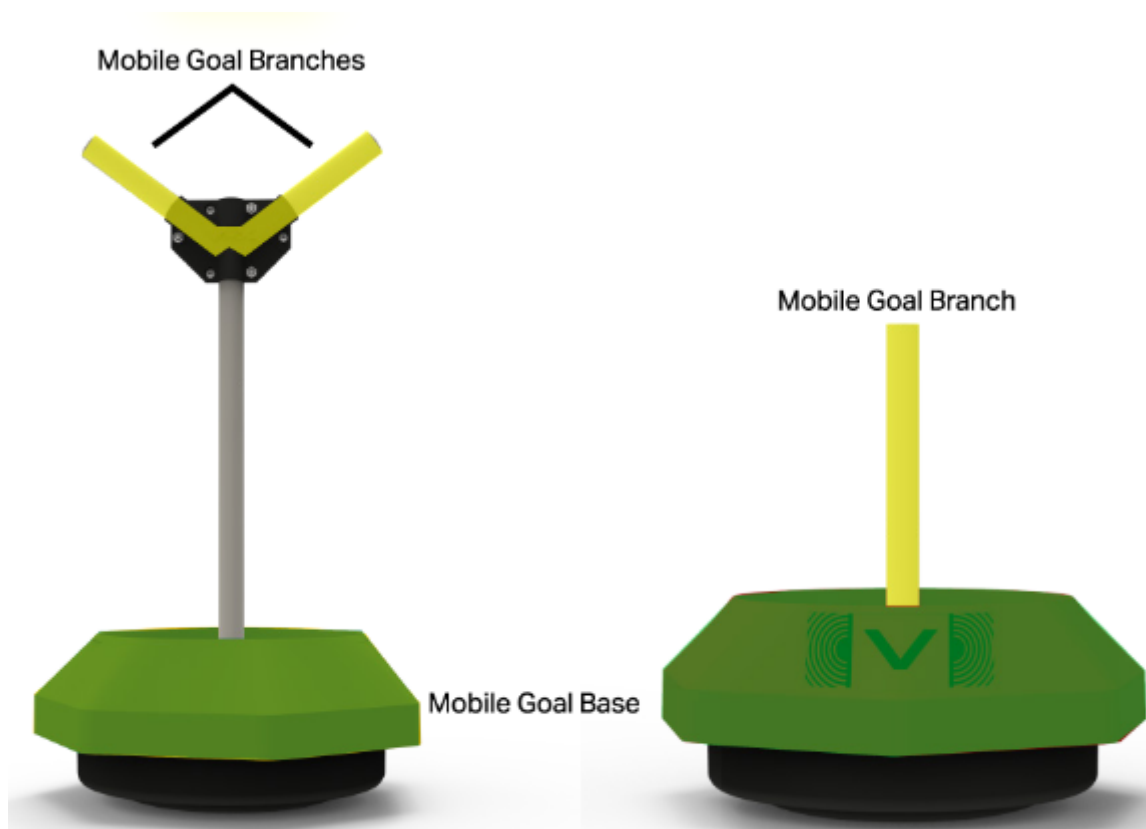


Figure 15: A Mobile Goal. The Base and Branches are highlighted.

Under the current definition of a Mobile Goal Base, is an upright mobile goal in contact with the Alliance Home Zone not considered scored as the colored plastic bottom portion is not in contact with the Alliance Home Zone? This appears to be counter to the intent of the scoring section as there are multiple diagrams showing upright Mobile Goals considered Scored.

Answered by Game Design Committee

Thank you for pointing this out. The definition of Mobile Goal Base has been revised in version 0.2 of the Game Manual as follows:

The 7-sided plastic bottom of a Mobile Goal with a maximal diameter of 13" (330.2mm). Rings may be Scored in the "bowl" of a Mobile Goal Base for points. Both the yellow, blue, or red "upper" portion, and the black "lower" portion, are considered parts of the Mobile Goal Base. See Figure 15.

809: Autonomous Scoring

12-Jun-2021

Scoring

The game specific definition of balance on page 9 of the Tipping Point game manual version 0.1 mentions that criteria must be met at the end of the match. On page 10 of the same manual, it states that a robot or a mobile goal may be considered elevated at the end of a match.

Does this mean that there are NO elevation points awarded at the end of the 15 second Autonomous period?

Answered by Game Design Committee

Does this mean that there are NO elevation points awarded at the end of the 15 second Autonomous period?

This is correct.

804: Mobile Goals not touching tiles do not score?

10-Jun-2021

Scoring

Do mobile goals on an alliance robot in their Alliance Home Zone count as scored? The only mention of transitive rules is in connection to the platform, and in the definitions the Alliance Home Zone is defined as the gray foam tiles themselves; it is not a 3-dimensional volume. This definition seems to suggest that only Mobile Goals touching a gray foam tile (or the Alliance Platform) count as scored.

Answered by Game Design Committee

This definition seems to suggest that only Mobile Goals touching a gray foam tile (or the Alliance Platform) count as scored.

This interpretation is correct.

Edit: In the v1.1 Game Manual Update, the definition of Alliance Home Zone was modified to include the following statement:

The Alliance Home Zones are a 3-dimensional volume, defined by the infinite upward projection from the foam tiles inside of the Alliance Home Zone boundaries.

Therefore, Mobile Goals which are being held by a Robot (off of the field tiles) would still meet this portion of the definition of Scored.

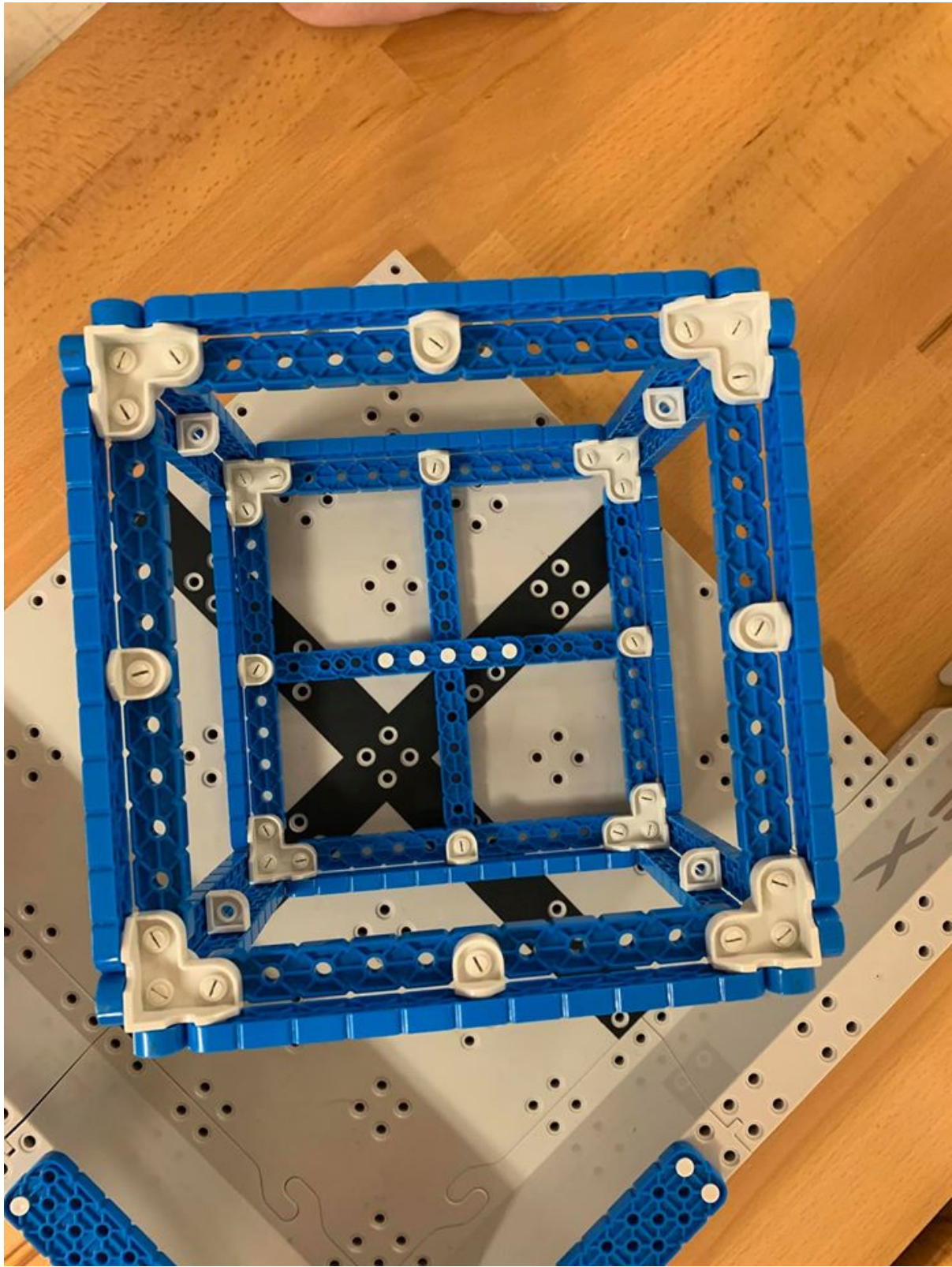
591: Blue/Red Cube Scoring Clarification

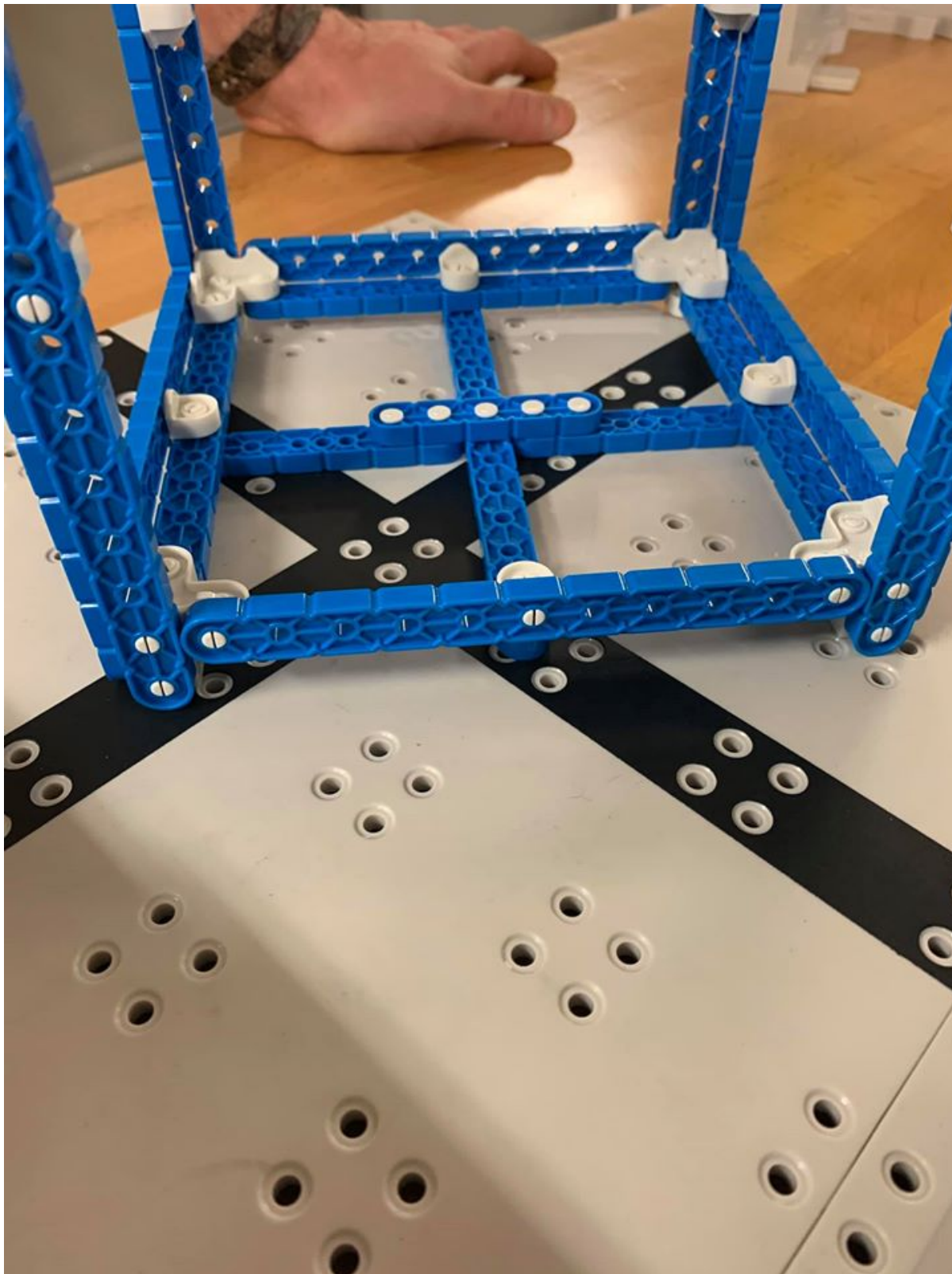
10-Mar-2020

Scoring

Reviewing the game manual in preparation for Worlds, we have a scoring situation we need to clarify. The cross on 'top' of the cube is touching the floor of the field, but only the black border of the corner goal, even though the cube appears to be within the corner goal. Would this score or not?

Also, at our recent state event, a REC Emcee told us to take off the corner goal colored piece #026 2 x 12 and hold it parallel to corner goal and swipe it within the scoring zone ... said if the piece touches the cube then it is scored. Please clarify this as well.





Answered by Game Design Committee

Please review the [Q&A Usage Guidelines](#), specifically point 3, "Quote the applicable rule from the latest version of the manual in your question", and point 4, "Make a separate post for each question".

The definitions of Scored and Corner Goal read as follows, with some portions bolded for emphasis:

Scored - A Game Object is Scored if it satisfies one of the following conditions, and is not touching a Robot.

A Cube is Scored in a Corner Goal if **any part of it is contacting a Corner Goal** of the same color as the Cube. See the definition of Corner Goal for specific details.

Corner Goal – One of the four 6" square goals located in the corners of the Floor that are used to Score Cubes. The inside edges of the black lines surrounding the Corner Goal mark the outer edges of the goal. **The Corner Goal is defined as this portion of the Floor, not the 3-dimensional volume above it. The field perimeter and black lines are not considered part of the Corner Goal.**

The Cube in the photo you have attached appears to be only contacting the black lines surrounding the Corner Goal, not the Corner Goal itself. Therefore, it would not be considered Scored.

Also, at our recent state event, a REC Emcee told us to take off the corner goal colored piece #026 2 x 12 and hold it parallel to corner goal and swipe it within the scoring zone ... said if the piece touches the cube then it is scored. Please clarify this as well.

We are not sure how to visualize the test you are describing. As quoted above, the primary concern when determining whether a Cube is Scored is to check if the Cube is contacting the Corner Goal. Visual checks or "paper tests" (attempting to slide a piece of paper under the Cube to see where it contacts the Floor) are usually all that is necessary.

513: Ball inside cube, both are "out of the field"

28-Jan-2020

G10 Scoring

A ball and a cube both leave the field as described in **G10**, with the ball coming to rest inside the cube. Going strictly by the definition of **scored**, the ball meets all conditions.

In <https://events.vex.com/VIQC/2019-2020/QA/308> the cube was considered scored because it met all conditions despite touching the actual floor outside of the field

In <https://events.vex.com/VIQC/2019-2020/QA/414> the cube that was "out of the field" was determined to be ineligible for gameplay.

Would the ball not be considered scored because the cube is "out of the field"?

Answered by Game Design Committee

As noted in your linked Q&A 414, a Game Object which is "outside of the vertical projection of the Field Perimeter and no longer in contact with the Field, Field Elements, other Game Objects, or Robots", is now considered "out of the Field", and is ineligible for gameplay. "Ineligible for gameplay" is intended to encompass "ineligible for any Scoring".

No, the Ball would not be considered Scored.

491: Skills utilization of alliance towers

20-Jan-2020

Robot Skills Challenge Scoring Towers

[QA 365](#) asked if both alliance towers may be used. The answer given just repeated the rules. To be more specific, RSC1.c states that robots may utilize **either** alliance tower. In Tournament Manager, skills scores are allowed to have 7 towers, indicating that **both** towers were used. Which is the correct interpretation? How many towers are allowed to be

utilized by a team during a skills run?

< RSC1 > In Robot Skills Matches, all Goal Zones and Alliance Towers considered to be the same color for the purposes of any Alliance-specific rules or definitions.

- a. Robots may start on either side of the field, as long as they fulfill the constraints set forth in <SG1> and <G7> for the chosen Alliance's side.
- b. Robots may Score Cubes in any color of Goal Zone for points.
- c. Robots may utilize either Alliance Tower for Placing Cubes.

Answered by Game Design Committee

Another way to interpret the intention of the word "either" would be to reference the opening sentence of RSC1, as quoted:

In Robot Skills Matches, all Goal Zones and Alliance Towers considered to be the same color for the purposes of any Alliance-specific rules or definitions.

The Alliance Towers are both the "same" color. Therefore, there is no "opposing Alliance Tower" as referenced in SG3. Therefore, Robots are permitted to interact with either Alliance Tower (or both, or neither) at any point during the Match.

456: Robot Touching Cube on Platform

12-Dec-2019

Scoring

If a robot is touching a green cube on the platform is it still considered scored? (ex. if the robot was moved away, the cube would be unaffected).

If a robot is supporting a green cube on the platform is it still considered scored? (ex. if the robot was moved away, the cube would fall off OR the cube would swing low enough to contact the field perimeter).

A Cube is Scored on a Platform if it meets the following criteria: i. The Cube is contacting the Platform (including its supporting structures). ii. The Cube is not contacting the Floor. iii. The Cube is not contacting the Field Perimeter. iv. The Cube matches the color of the Platform (i.e. is a green Cube). Note: A maximum of one (1) Cube may count for points per Platform.

I believe both situations are considered scored.

Answered by Game Design Committee

The portion of the Game Manual that you have quoted is one of the individual conditions found underneath the definition of Scored. The full definition begins with the following:

Scored - A Game Object is Scored if it satisfies one of the following conditions, **and is not touching a Robot.**

The requirement for a Game Object to not be touching a Robot applies to all Scoring conditions. Therefore, neither of the situations you have listed would be considered Scored.

433: Broken cube scored on a platform

25-Nov-2019

Scoring

If a part of a green Cube breaks off during a match, can the Cube placed on the platform be considered "scored"? I am specifically considering a scenario where part of the cube breaks off and falls to the floor within the field perimeter. What remains of the cube is successfully placed on the platform. Is the part of the cube that has become detached considered as "contacting the floor"?

From the definition of "Scored" d. A Cube is Scored on a Platform if it meets the following criteria: i. The Cube is contacting the Platform (including its supporting structures). ii. The Cube is not contacting the Floor. iii. The Cube is not contacting the Field Perimeter. iv. The Cube matches the color of the Platform (i.e. is a green Cube). Note: A maximum of one (1) Cube may count for points per Platform

Answered by Game Design Committee

In the specific scenario you have described (e.g. one VEX IQ beam detached from a Cube), we would advise the Head Referee to give Teams the "benefit of the doubt" and consider the Cube to be Scored. However, this is not a blanket ruling, and will ultimately be at the Head Referee's discretion; if a Cube has completely broken in half, then it should not be considered Scored.

To minimize the possibility of difficult judgment calls, Head Referees are advised to check any VEX IQ part connections between matches, as noted in the associated [Referee Training video](#). Teams should also bear in mind rule G13:

<G13> Don't damage the Field or Game Objects. Robots may not grasp, grapple, or attach to any Field Elements, including the Platforms. Strategies with mechanisms that react against multiple sides of a Field Element in an effort to latch or clamp onto said Field Element are prohibited.

While Robots are permitted to grasp, grapple, or attach to Game Objects, Robots which cause damage to Game Objects would be considered in violation of this rule and/or <S1>.

The intent of this rule is to prevent Robots from unintentionally damaging the Field or Game Objects. Minor violations of this rule that do not affect the Match will result in a warning. Score affecting offenses will result in a Disqualification. Teams that receive multiple warnings may also receive a Disqualification at the Head Referee's discretion.

414: Can robots retrieve objects that fall outside the playing field

11-Nov-2019

Scoring

Can an object that leaves the field be retrieved by a ROBOT and used to score. This is especially critical for teams when a cube falls very close to the perimeter on the outside and the robot can grab it and bring it back into the field within seconds. Do we allow this or stop the attempt and remove the object (cube) from play the instant it is outside the field as defined in <G10>?

<G10> Keep Game Objects in the Field. Game Objects that leave the Field during a Match will not be returned. "Leaving the Field" means that a Game Object is outside of the vertical projection of the Field Perimeter and no longer in contact with the Field, Field Elements, other Game Objects, or Robots.

Answered by Game Design Committee

Thank you for quoting the relevant rule. As stated in G10, Game Objects that leave the Field must not be returned. Therefore, once an object is "outside of the vertical projection of the Field Perimeter and no longer in contact with the Field, Field Elements, other Game Objects, or Robots", then it is now considered "out of the Field" and ineligible for

gameplay.

Typically, this rule is used to refer to human hands returning the Game Objects to the field, but using Robots instead of hands would also be considered a violation of G10.

413: Green cube on platform also resting on a cube outside the Field

11-Nov-2019

Scoring

If a green cube is resting on a platform, but is also supported by a cube that fell outside the playing field, would the green cube score? The cube meets all the criteria to score:

d. A Cube is Scored on a Platform if it meets the following criteria: i. The Cube is contacting the Platform (including its supporting structures). ii. The Cube is not contacting the Floor. iii. The Cube is not contacting the Field Perimeter. iv. The Cube matches the color of the Platform (i.e. is a green Cube). Note: A maximum of one (1) Cube may count for points per Platform.

Answered by Game Design Committee

Thank you for including the relevant rule in your question. When determining if a Game Object is Scored, the stated criteria in the Game Manual are the only things that should be used to make a decision. If all criteria are met, then it is should be considered Scored as applicable.

In your example, the Cube meets all of the criteria for being Scored. Therefore, it would be considered Scored.

390: Robot touching placed cubes at the end of a match

22-Oct-2019

Scoring

If a team is in contact with a placed tower cube in a neutral or their own alliance tower at the end of the match would it be considered scored for the multiplier or would the multiplier be voided for that tower.

Answered by Game Design Committee

The definition of Placed states the following:

Placed - A Cube status. A Cube is considered Placed in a Tower at the end of a Match if any part of it is breaking the plane defined by a given Tower's Placing Line.

This is the only criteria used to determine if a Cube is considered Placed (and therefore used in scoring calculations). Robot contact is not listed as a criteria, and therefore has no bearing on whether or not a given Cube is considered Placed.

387: Cube touching score zone, but also on wall

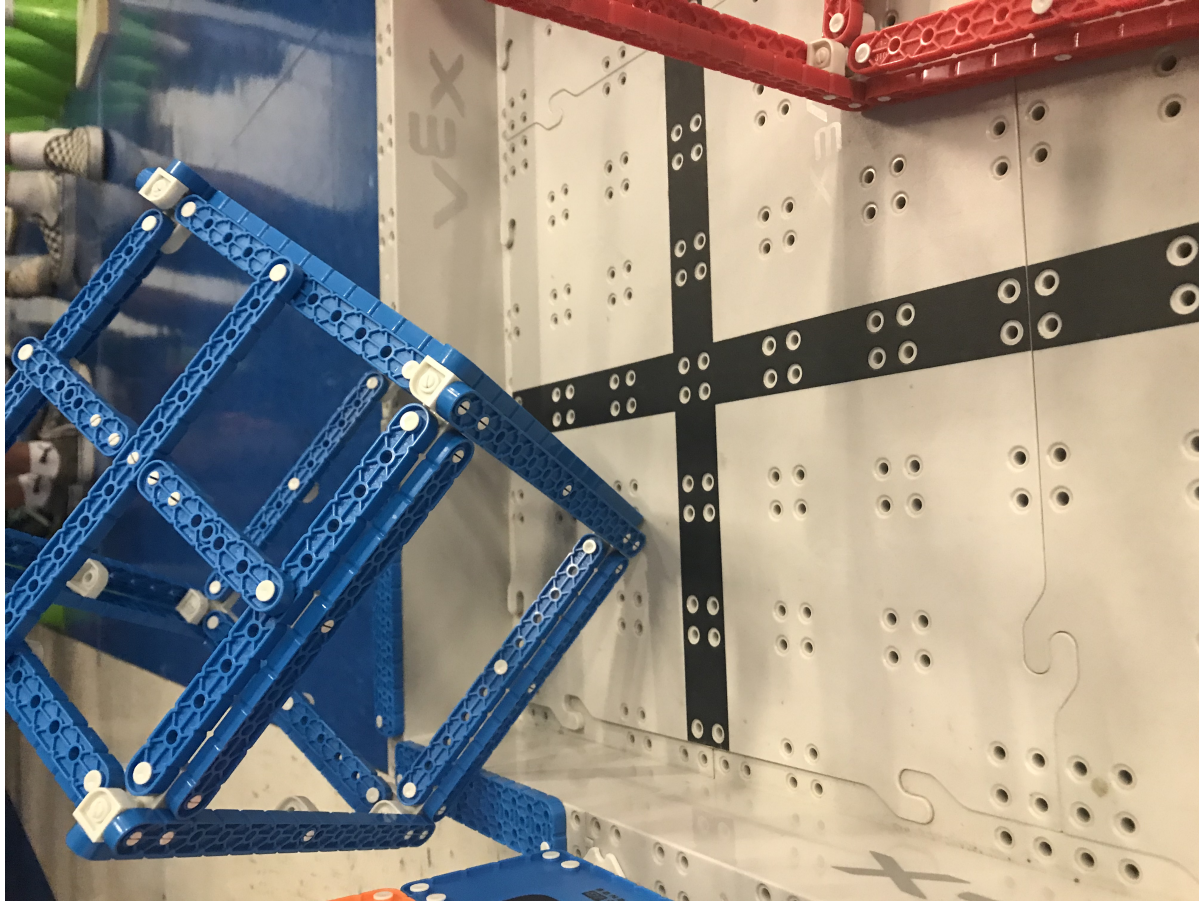
20-Oct-2019

Scoring

If a blue or red cube is in contact with the appropriate color Corner Goal, but is also leaning on a wall, does it count as scored? The rule is not specific on this scenario:

c. A Cube is Scored in a Corner Goal if any part of it is contacting a Corner Goal of the same color as the Cube. See the definition of Corner Goal for specific details.

Corner Goal – One of the four 6” square goals located in the corners of the Floor that are used to Score Cubes. The inside edges of the black lines surrounding the Corner Goal mark the outer edges of the goal. The Corner Goal is defined as this portion of the Floor, not the 3-dimensional volume above it. The field perimeter and black lines are not considered part of the Corner Goal.



Answered by Game Design Committee

As you quoted, the only criteria that should be used when determining whether a Cube is considered Scored or not is whether any part of it is contacting a Corner Goal.

In the photo you have provided, the bottom edge of the Cube does appear to be contacting the Corner Goal. Therefore, it would be considered Scored.