Eruv of greater Amsterdam
The Nederlands-Israëlitische Hoofdsynagoge (Jewish Community of) Amsterdam is happy to publish this booklet on the occasion of the Conference of European Rabbis, taking place in Amsterdam, iyar 12th–14th 5777 / May 8th–10th 2017, and founded 60 years ago through the efforts of the late Chief-rabbi of Amsterdam, Rav Aaron Schuster zatsal.

Van der Boechorststraat 26, 1081 BT Amsterdam, The Netherlands

rabbinaat@nihs.nl

www.nihs.nl
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1. Introduction

It is a joyous and momentous day for me to see that my dear friends Dayan Eliezer Wolff and Dayan Refael Evers, with the help of Dr. Michael Bloemendal, Rav Shmuel Katz and Rav Pinchas Grayeff, have produced this wonderful work, which will allow all those who read it to understand the principles which formed the basis of my establishing the Amsterdam eruv.

Approximately ten years ago, after much hard work together with my colleagues in the Beis Din, with the help of the Almighty, the city's roads became fit for carrying on Shabbos. I saw the great efforts they invested to see this work reach its completion.

Now is a fitting time to thank the mayor, the council heads and the community leaders for their role in the success of this major undertaking.

May they all see much blessing.

A Ralbag

[Signature]
2. Shabbat

Maimonides writes that G'd commanded us to rest on Shabbat to acknowledge (a) the fact that G'd created the universe and (b) that G'd freed us from the slavery in Egypt.

The Brisker Rav elaborates on the comment by Maimonides and explains that Shabbat is a double sign (ot) between G-d and the Jewish people, because firstly we were created by G-d and secondly we were chosen to be His people.

Shabbat involves remembering (zachor) and observing (shamor). We do this by emulating G'd's ways as Creator of the universe. If G'd, who is almighty, stopped His work on Shabbat, we as limited human beings surely should stop creative activity (Melacha) and dedicate at least part of our time to the sanctification of our lives.

3. Melacha

Melacha is translated as work, but it should not be confused with the secular definition of work, which normally means occupational labor or (heavy) exercise. Melacha has to do with creating. Hence, according to Jewish law turning on the light on Shabbat is considered Melacha, but moving all the furniture to the twentieth floor without an elevator is not.

The Talmud defines 39 categories of forbidden creative activity on Shabbat, which are derived from the work that was done to build the
Tabernacle (mishkan). The Talmud lists main categories of work (avot melachot) as well as toldot - which is work that is done in a different way than in the mishkan, but achieves the same result.

Besides these melachot, which are forbidden by the Torah, our Sages prohibited many activities that may lead to violation of a Torah prohibition, activities that may give rise to suspicion of prohibited activity, and activities that resemble weekday activities (uvdah dechol).

4. Transferring and carrying

One of the 39 forbidden main melachot on Shabbat is hotza’a vehachnasa, ‘transferring’. On a Torah level hotza’a vehachnasa is transferring from a ‘private domain’ to a ‘public domain’, as well as carrying an object four amot (about 2 meters) from one place in a ‘public domain’ to another. We will discuss the halachic definition of these domains in the next section. The Sages have extended this prohibition to some other cases.

On a Torah level transferring is only forbidden, when a single person purposely does the whole Melacha on an object that is bigger than the halachic minimal measure. But the Sages extended the prohibition to other cases, in order to prevent people from violating the Torah law.
5. Four *reshuyot* (domains)

5.1. The *reshuyot*

The Sages identify four *reshuyot* (domains). The category to which a *reshut* belongs is not related to ownership.

A. A *reshut hayachid* is a private domain which is intended for human use (*mukaf ledira*) of at least 32 x 32 cm (4 x 4 *tefachim*) enclosed by walls of at least 80 centimeters (10 *tefachim*) high or a ditch of 80 centimeters deep. The airspace above the *reshut hayachid* has the same status.

B. A *reshut harabbim* (halachically defined public domain) is an open, unroofed area of at least 16 *amot* (a bit less than 8 meters) wide, not enclosed by partitions, where at least 600,000 people go through. There are different opinions how often this has to happen, and who are included in the 600,000 (see 5.2.). Also the area has to run uninterrupted through the whole city. Such a *reshut harabbim* can only be rendered a *reshut hayachid* by an uninterrupted chain of walls and doors that are closed at night. Airspace of a *reshut harabbim* above 80 centimeters is neither *reshut harabbim* nor *reshut hayachid*, but is considered 'free space' (*makom petur*).

C. A *makom petur* is a space with free status. This can be either the airspace above 80 cm of a *reshut harabim* or *carmelit* (see D), or an area less than 4 x 4 *tefachim* (32 x 32 cm) and more than 3 *tefachim* (24 cm) deep or high.
On a Torah level (*de’orayta*) the main difference between a *reshut harabbim* and a *reshut hayachid* is the enclosure. In the next sections, we will discuss what can be used for this enclosure.

As the Rambam mentions, on a Torah level it is permitted to carry and transfer from someone’s home to a communal courtyard and vice versa, as well as to a street with walls on three sides and a post on the open sides and vice versa, because these places are not a *reshut harabbim de’orayta* as defined in B. However, the Sages considered such communal places as a kind of public domain, and required extra measurements in order to prevent people from carrying or transferring in a *reshut harabbim de’orayta*. A rabbinical public domain is called a *carmelit*.

D. A *carmelit* is an ‘in between’ area, not exactly a *reshut harabbim de’orayta*, and not really a private domain. According to the Chazon Ish nearly all of our streets in a city are a *carmelit*. Airspace of a *carmelit* above 80 centimeters is *makom petur*.

5.2. **Different opinions about *reshut harabbim* (public domain)**
The Rambam is of the opinion that a *reshut harabbim de’orayta* is a marketplace or an unroofed road that is more than 16 *amot* (around 8 meters) wide that runs into a marketplace. Nowadays many of the
streets in a city have this width and hence would be defined as a *reshut harabbim de’orayta*.

However, Rashi, Tosafot and the Behag require additionally the presence of 600,000 people in order to make a *reshut harabbim de’orayta*. There are different opinions as to what exactly this means. From Rashi it seems that when there are 600,000 residents and commuters in the city, the whole city is one big *reshut harabbim*. Rav Moshe Feinstein interprets the Tosafot and Behag as 600,000 people factually being in the streets. Rabbi Ephraim Z. Margoliot’s opinion is that 600,000 people have to travel in a certain street within the area in one day, or at least that they are in the close environment and are all able to travel in a specific road during the same day because of its capacity.

The 600,000 people include everybody, elderly people and children, Jews and non-Jews, and might even include people in cars (which actually are a *reshut hayachid*) as long as they travel.

The Chazon Ish states that in order to make a *reshut harabbin de’orayta* there should be a continuously straight road. Also, when this road has rows of houses at both sides, it qualifies as a *reshut harabbim de’orayta*. However, as soon as it bounces into a fence or building, this is considered as a third ‘wall’ and the road is not a *reshut harabbim de’orayta* anymore.
6. **Eruv**

6.1. **Introduction**

*Eruv* means mixing. An *eruv* blends many different areas, properties and people into a single *reshut hayachid*. Such a blended *reshut hayachid* can consist of a few homes, but may even comprise a complete city.

According to our tradition, King Solomon taught us around 3,000 years ago how to halachically create a single *reshut hayachid* out of many different *reshuyot*, and thus make it possible to carry and transfer in the streets. In the Talmud Bavli (*Eruvin* 21b) Rabbi Yehuda said in the name of the famous Talmudic scholar Shmuel that when King Solomon established the laws of the *eruv*, a Heavenly voice proclaimed: ‘My son, when you are wise, I likewise rejoice’ (Mishlei 23:15).

6.2. **The obligation to establish an eruv**

The making of an *eruv* is one of the seven *mitsvot derabbanan* (Rabbinic obligations), as some people might forget the prohibition of carrying on *Shabbat*. As the regulations of the *eruv* are complex, it was recommended to make every *eruv* under the supervision of a Rabbi, who is a recognized expert in this area (KSA 94:24).

Several distinguished scholars of the past centuries recommended strongly or at least supported the idea of establishing an *eruv* to be able to carry in the whole town.

Rabbi Joseph Karo (Shulchan Aruch, OH 395) considers it a *mitsva* to establish a city *eruv*.

Rabbi Moshe Schreiber (Sh’ut Chatam Sofer, OH 99) writes that it is imperative to establish an *eruv*, that it is a rabbinical responsibility.
and that anyone with common sense knows that it is nearly impossible to keep *Shabbat* with the whole family without an *eruv* in the city.

In the Mishna Berura (346:8), Rabbi Yisrael Meir Kagan, the Chafetz Chaim, states that no one should object the building of an *eruv*, even in cities with very wide roads (MB 364:8). However, he adds that because of the complexity of the matter, even in the presence of an *eruv*, it may be better not to carry at all.

Rabbi Avrohom Yeshaya Karelitz simply states that the halachic basis for our city *eruvin* is reliable (Chazon Ish, OH 107:7)

Rabbi Avraham Borenstein, the Sochatchover Rebbe, warned that those who try to prevent the construction of *eruvin*, cause others to sin (Sh’ut Avnei Nezer, OH 266).

Rabbi Moshe Feinstein (IM, OH 5:28 end and 5:29) writes however, that the situation nowadays is different, because contrary to what was in the past, we now have everything we need at home. Hence according to him, although the establishment of an *eruv* is a possibility, it is not an obligation anymore.

**6.3. Requirements for an *eruv***

The establishment of an *eruv* consists of the following elements.

A. **Enclosure.** The area, to be considered a *reshut hayachid* (in order to allow carrying and transferring), has to be surrounded uninterrupted. The enclosure can consist of walls, fences, natural barriers, gate–like constructions, and portals (*tsurot hapetach*). The exact method how to achieve this is outlined in the Talmud. Fields or other terrains without inhabitants (halachically called *karpat*) within the enclosed area may impede the total area to be considered a *reshut hayachid*. However, this is dependent on the exact use of the terrain.

B. **Leasing the area (*sechirat reshut*) from the local authorities.**

One of the problems encountered when one wants to make an *eruv* is that halachically, it works only for those who recognize the
principle of the eruv and the way it is implemented (modim be'eruv). This means that the premises of those who do not acknowledge the eruv would break the collective reshut hayachid. To solve this problem, the Jewish community or the Rabbinate leases the right to carry in those properties from the local authorities. The idea behind this is that the mayor has authority over both the public roads and private premises, because he can allow policemen to enter private houses of all citizens after issuing warrant. Some rabbis hold that in a country that has a 'rule of law', the local authorities do not have a free right to enter private premises and hence, this sechirat reshut does not work. In practice, this opinion is mostly not followed.

Also, the permission to use public property like cables, poles, or public space to place objects on, by which the area will be turned into a reshut hayachid, is leased from the authorities.

C. Eruv chatseirot and shituf mevo'ot. In addition to the enclosure and the sechirat reshut, our Sages instituted a symbolic unification of all the private properties within the borders of the eruv. This is called eruv chatseirot. The idea is that a person's main dwelling is the place where he eats. By creating a communal food supply (practically one big loaf of bread, or more practically a comparable amount of matzes), we unify all the inhabitants that use the eruv into one big family. Strictly speaking the term eruv chatseirot refers to a device that allows carrying from one
house to another within the same courtyard, or within the shared courtyard that these houses are in. When we make carrying possible from courtyard to courtyard (and hence when we make an *eruv* for a whole city), it is called *shituf mevo'ot*.

When private individuals make an *eruv*, they collect matzes of all participants and form a unity in the house where the matzes are kept. A blessing (*beracha*) is said, followed by a declaration that with this *eruv* unification all the participants are able to carry and transfer in the whole area of the *eruv*. Rabbenu Tam wanted us to make an *eruv chatseirot* every Friday afternoon, because he was afraid that the matzes will deteriorate and the people will carry without an *eruv*. Nowadays, it is customary to renew the municipal *eruv* once a year just before Pesach with new matzes.

6.4. Closing gaps (*pirtsot*) in the enclosure

6.4.1. Reshut harabbim de’orayta

Gaps in the fence of a *Reshut harabbim de’orayta* can only be rectified by real doors, that need to be closed at least at night. The Chazon Ish decided that our cities are a *carmelit*, and we need then only a door that can be closed (NS 23 notes 9 & 10), i.e. the ability to close alone, suffices.

6.4.2. The portal (*tsurat hapetach*)

A portal (*tsurat hapetach*) essentially exists of the outlines of a door, viz. two vertical posts with a lintel over their tops. This is considered a proper closing of the *pirtsa*, despite the open space within the outlines of the door. When the vertical posts are not straight there might be a problem of *pitchei shimael* (crooked door
frames). Irregular lintel forms are disqualified by the Chazon Ish, but other rabbis allow them. The lintel should be as taut as possible but some rabbis are lenient when the lintel moves in the wind (AS 362:37). There are several other cases of pitchei shimai.

The Talmud invalidates a tsurat hapetach where the lintel does not go over the top of the posts but is connected to the sides (tsurat hapetach min hatsad). This can happen e.g. when power cables are used for the lintel. It can be rectified by putting barrels or other objects (poles) right under the wires. According to the halacha, these objects are considered to reach up to the lintel (although in fact they are not), and hence the lintel is considered to go over the top of the post as needed (gud asik mechitsa).

If one uses only partitions in the form of a tsurat hapetach, the Rambam requires the poles to stand less than ten amot (4.8 m) apart. Because of the principle of omed merube al haparuts (more closed than open fence), we prefer most of the walls of the eruv to be solid fences.

6.4.3. Tsurat hapetach with kane akum

Normally, strictly vertical poles are used for the eruv. According to some Sages, also poles that are tilted or bent may be used for a tsurat hapetach, provided that the angle on the pole is small enough to consider the pole to be vertical. This is called tsurat hapetach with kane akum (see also 8.2.4).
6.4.4. *Pi tikra yored vesotem*

*Pi tikra yored vesotem* is a halachic principle that allows to consider the edge of a roof as a closure.

6.4.5. *Delet hareuya lehinael*

Another way to close a gap in the enclosure is by using a kind of sliding closure (*delet hareuya lehinael*). This is a gate-like construction that can be closed, but is (mostly) kept open.

Several proposals for this type of closure have been made by the rabbis. All of these have halachic advantages and disadvantages. Rav A.L. Ralbag suggested the use of wrapped strings (see illustration) around a strong circulating pole. These strings are connected to another pole that can be carried across the street and then can be connected to a pole at the other side of the *pirtsa*. Inside the cage the strings are open for one *tefach* (8 cm) at least (because this means that this gate-like construction is already opened, albeit a little bit, before *Shabbat* and it is not forbidden to open it further on *Shabbat*). For this proposal, he received the *hashkamot* (approbations) of eight leading, internationally recognized scholars, viz. Rav Shmuel Wosner Hallevi (Bnei Brak), Rav Yisroel Ya’akov Fisher (Eda haCharedit Yerushalaim), Rav Pinchas Hirschprung (Toronto), Rav Eliezer Yehuda Waldenberg (Tsits Eliezer), Rav A.D. Rosenthal (Be’er haMelech), Rav A.D. Horowitz (*Av Beth Din* of Strassbourg), Rav Aharon Yehuda Arik (New York), and Rav Chanoch Padwa (*Av Beth Din* of the Machzike Hadas, London) who urged him to make the *eruv* as soon as possible.
Some rabbis (Chl, OH 78) state that a delet hareuya lehinael requires a lintel on top, as they do not consider it a 'door' without a lintel. Most rabbis, however, say that it is enough that a delet hareuya lehinael is suitable to block the traffic, and therefore a lintel at the top is not
required.

7. The history of the Amsterdam eruv

7.1. Ring of canals
The Amsterdam eruv is based on using waterways for the enclosure, as Amsterdam was built within a ring of canals. The canals served as halachic fences, as they are more than 10 tefachim (80 cm) deep (see 5.1.A).

The bridges over these canals were drawbridges and during the night in Amsterdam they used to be opened (meaning in the upside position). Hence, they are not considered as a ‘breach of the eruv’ (Rav Ya'akov Sasportas quoted in ST 363:12).

Modern times called for new measures. Amsterdam expanded outside the ring of canals and some of the drawbridges became permanent bridges.

7.2. Chains on the permanent bridges
During the years 1863/1864, chains that could be stretched over the whole bridge were attached to one railing of permanent bridges. This was considered a sufficient closure, although the chains remained rolled up.

When Chief-rabbi J.H. Dunner was appointed in 1874 in Amsterdam, for halachic reasons he
was not satisfied with this method of using chains as closure. He tried to introduce another form of closure, a portal (*tsurat hapetchach*), over the bridges. However, the Government did not permit this.

### 7.3. Rolling out nets of mesh

At the end of the 19th and the beginning of the 20th century, the Rabbis Vredenburg and Onderwijzer used a kind of slide-closure (*delet hareuya lehinael*), a principle that was used in East-European communities, for the *eruv*. This consisted of a gauze net wrapped around a vertical pole and placed at one end of the breach in the fence, that can be stretched out to the other end. This closure could be kept "hidden" in a cupboard at one side of the bridge. Well known rabbis, such as the Avnei Nezer, permitted this solution, providing it was kept in a vertical position. It became problematic, when the Government demanded that the poles would be positioned horizontally instead of vertically. Although it was problematic, the Amsterdam Rabbinate did accept the horizontal poles for the *eruv* as a force majeure.

### 7.4. Mesh on horizontal poles rejected

For Rav M. Just, who came to Amsterdam in the sixties of the last century and later became Chief-rabbi of Amsterdam, the nets of mesh on horizontal poles were unacceptable, as two steps instead of a single one have to be made in order to actually close the fence.
Firstly, the horizontal sliding closure has to be rotated to a vertical position, and secondly the net has to be rolled out across the entire length of the breach. Therefore, he forbade carrying and transferring in Amsterdam on Shabbat.

7.5. Increase of inhabitants and tourism
Another problem was the increase of the Amsterdam population and tourism. Amsterdam nowadays has more than 800,000 inhabitants, and some tourist events can attract comparable numbers per day. As we have seen in section 5.2 a number of more than 600,000 people may render a place a reshut harabbim de’orayta, which requires more stringent measures to allow carrying and transferring. This is not unique to Amsterdam and applies to other big cities also. Therefore, many modern eruvin are based on the view of the Chazon Ish (see also section 5.2). He holds that, when an area is surrounded by buildings and fences, and there are more buildings than there is open space on all four sides of the area (omed merube al haparuts), the area is not a reshut harabbim de’orayta, even if there are more than 600,000 people every day within this area. Because of modern urban planning, this is the case in many cities nowadays.

7.6. The current eruv
When Rav A.L. Ralbag was in Amsterdam as a dayan (1975–1983) he made a proposal for the reestablishment of the eruv. The proposal made use of existing waterways, quays, embankments and other natural barriers. In places where there were gaps in the enclosure, provisions were made, such as
a tsurat hapetach (see 6.4.2), delet hareuyya lehinael (see 6.4.5), and pi tikra yored vesotem (see 6.4.4). In 2008, when Rav Ralbag was the Chief-rabbi and Av Beth Din of Amsterdam, he restored the eruv on the basis of his earlier proposal, together with the then Amsterdam Dayanim E. Wolff and R. Evers. The total eruv was approved in the Sh’ut Yeshiwh Yitschak (V3, 17-24)

The official initiation of the new eruv was made in the presence of among others, the mayors of Amsterdam and Amstelveen, Mr. J. Cohen and Mr. J. Van Zanen, the president of the board of the Jewish Community in Amsterdam, Mr. A.T. Eisenmann, and the secretary of the community, Mr. D. Serphos.

8. Description of the current Amsterdam eruv

A map of the Amsterdam Eruv is given in the back of this booklet, which shows that essentially the enclosure is formed by water. A list of the gaps in this water enclosure (pirtsot) is given in Appendix 1. The principles are described in the next sections.

8.1. The enclosure

8.1.1. Water

The biggest part of the current Amsterdam eruv is formed by various waterways that surround Amsterdam.
In 5.1A, it was mentioned that in order to be a *reshut hayachid* according to Torah law, the area has to be *mukaf ledira* (intended for human use). The question is, whether a by water surrounded area meets this criterion. A second, partly related question is whether a partition that in effect is not recognized as a fence, can be used for an *eruv*. This is called *atu rabbim umevatleim mechitsa* (many go over it and hence nullify the fence).

Because of these questions, the Chacham Zvi and Rabbi Ya'akov Emden would not rely on natural fences. However, the Chacham Zvi (ch. 5 about the *eruv* of The Hague) accepted the ‘canal walls’ as fences for an *eruv*, as they are manmade artificial trenches. As the Ritva writes (*Eruvin* 22b), artificial in contrast with natural fences will halachically not be invalidated when many people pass over them.

Similarly, the river banks of Amsterdam can be considered manmade, as they are kept up by human effort. All the rivers and canals are regularly checked by the water authorities in order to prevent a build-up of sediment. And finally, the walls of many of the canals are much more than ten *tefachim* (80 cm) above the highest tide.

However, in order to be safe, the Amsterdam Rabbinate also checks the whole water fence once a year by boat. In order to be considered as a fence, the angle that the embankments of rivers and canals make with the bottom has to be steeper than 24.62 degrees (*tel hamitlaket*). The steepness of the slopes is supervised and kept up by the water authorities and the Rabbinate. All of the outer sides of the waterways that are used for the Amsterdam
eruv appear to be steeper than this 24.62 degrees. This is illustrated by the fact that boats can reach the outer embankments of the waterways that are used for the eruv everywhere, as was checked and verified by the Amsterdam Rabbinate. Finally, even in case some parts of the river Amstel and canals would be less steep (which apparently is not the case), one could rely on the Chiddushei HaRim, who holds that the depth of the bottom of the river counts to qualify a waterway as a mechitsa (fence), irrespective of the steepness of the embankments.

8.1.2. Freezing of the water

The main concern in the winter is the freezing of the waterways. According to the Taz (OH 363:20) a water barrier that freezes in the winter, does not qualify as an eruv fence even in the summer, because the Rabbis wanted to prevent the risk that one might carry in wintertime (gezera).

On the other hand, the She’ilat Ya’avets (1:7) is lenient even in the winter when the waterways might be frozen, because he holds that frozen waters do not nullify the canals as an eruv fence.

The Amsterdam Rabbinate has always followed the opinion of the Magen Avraham (OH 363:31), who decides that the water fence is only nullified as part of the eruv, when the canals or rivers are firmly frozen, which means that people can freely go on it. According to the Amsterdam police this is when the ice layer is 7–9 cm.
8.2. *Pirtsoy* (gaps) in the enclosure and the solution

Bridges breach into the ‘water fences’ and create openings (*pirtsoy*), that may override the fence underneath. Although the Chatam Sofer allowed these bridges without any *tikunnim* (halachic repair), the Amsterdam Rabbinate nevertheless required a more stringent enclosure.

8.2.1. Drawbridges

Rabbi Ya’akov Sasportas (1610-1698, Amsterdam) decided, that the drawbridges do not nullify the water fence, because these bridges may be considered as doors. Most of the Amsterdam bridges are drawbridges. In this booklet, we will call them Sasportas bridges.

8.2.2. Fixed bridges

Also the fixed Amsterdam bridges are not considered to make the area a *reshut harabbim deorayta*, because of many reasons. Firstly, the bridges are never open-ended at both sides (*mefulash*), because they always end up in living areas that do not run straight from gate to gate (*misha’ar lesha’ar*, Beit Ephraim). Secondly, the extant structures at
the beginning and end of each bridge are valid portals for this matter (*tsurot hapetach*). And thirdly, the number of people living within the area of the *eruv* is less than 600,000. (In this number, commuters and tourists are not included).

### 8.2.3. Delet hareuya lehinael

For the current Amsterdam *eruv*, a *delet hareuya lehinael* is only used on the fixed bridges, although some Rabbis allow these bridges even without any fixing (Chatam Sofer, OH 89). These constructions are closed once every half a year (under the supervision of the local police).

### 8.2.4. Tsurat hapetach

For the Amsterdam *eruv* several infrastructural objects, like over-road traffic signs and train wires with poles have been used. In some places, we attached colored poles on the inside of infrastructural...
objects to correct problems with a *tsurat hapetach min hatsad* (see 6.4.2) and relied on the principle of *gud asik* (see 6.4.2) to connect the side-poles with the overhead cable. For some *tsurot hapetach a kane akum* (see 6.4.3) was allowed. In these cases, the angle of the poles was between 70 and 80 degrees, which is much more than the slope of 24.62 degrees of a *tel hamitlaket* (see 8.1.1), and hence acceptable.

![Image of railway infrastructure]

8.2.5. *Pi tikra yored vesotem*

For the tunnel that connects the centre of Amsterdam with the north, the principle of *pi tikra yored wesotem* was used in order to prevent it to be a breach in the *eruv* fence. In actual fact, this is superfluous, as this tunnel is covered with a *tsurat hapetach*.

![Image of Amsterdam tunnel]

8.3. *Karpefot*

As the *karpefot* (see 6.3A) within the area of the Amsterdam *eruv* are used for many kinds of human needs, the Rabbinate could rely, among others, on the Divrei Malkiel (4:3) in order to prevent nullification of the *eruv* by these *karpefot*.
8.4. Sechirat reshut
The sechirat reshut (see 6.2B) was done by paying €100 to the city of Amsterdam and the other cities within the eruv (Amstelveen, Uithoorn, Aalsmeer, Kaag & Braasem) for a rent of fifteen years (kinyan kessef).

8.5. Eruv chatserot
In Amsterdam, a box of matzes under supervision of the Rabbinate is kept in one of the local synagogues. Since the eruv is in fact a shituf mevo’ot (see 6.3C), it does not require the eruv to be put in a private house. In order to satisfy different opinions about chamets, both machine baked and hand baked matzes are used.

8.6. Pikuach haeruv, checkup of the eruv
The Amsterdam eruv is checked every week. Vulnerable points, like tsurot hapetach, are double checked. A group of people (mashgichim) divide the tasks and everybody controls his part of the perimeter. As was explained in 8.1.1. the waterways are checked on a yearly basis by boat. It is actually everybody’s obligation to
make sure that the *eruv* is operational. Even if it is not freezing cold, storming or snowing, the *eruv* can be dysfunctional because of many other factors. The validity of the *eruv* can be checked continuously on the website of the community.

9. LIST OF ABBREVIATIONS

- **AN**: Avnei Nezer, Responsa of Rabbi Avraham Borenstein, the Sochatchover Rebbe (1838–1910, Poland)
- **AS**: Aruch Hashulchan of Rabbi Yechezkel M. Epstein (19th century)
- **CHI**: Chazon Ish, Commentary of Rabbi Avrohom Yeshaya Karelitz (1878–1953, Israel)
- **IM**: Igrot Moshe, Responsa of Rabbi Moshe Feinstein (20th century, New York)
- **KSA**: Kitsur Shulchan Aruch, the short Jewish Codex (19th century)
- **MB**: Mishna Berura, commentary of the Chafets Chaim on the first part of Shulchan Aruch (20th century)
- **NS**: Netivot Shabbat by Rabbi Y.Y. Blau (20th century, Jerusalem)
- **OH**: Orach Haim, first part of Shulchan Aruch, Jewish Codex (16th century)
- **SA**: Shulchan Aruch of Rabbi Yoseph Karo (1488–1575)
APPENDIX 1
The breaches (*pirtsot*) in the water fence of Amsterdam and their solution

The Amsterdam *eruv* has:
- a circumference of about 55 km;
- an area of about 100 km²;
- 64 breaches (*pirtsot*):
  > 51 are "Sasportas" bridges,
  > one is a tunnel that can be closed by an internal door,
  > one is a tunnel with *pi tikra yored we sotem*,
  > three are bridges with a *Delet hareuya lehinael*,
  > eight are *tsurot hapetach* (one has also a *tel hamitlaket* and one has blocking doors). From the *tsurot hapetach* three are with *kane akum*.

<table>
<thead>
<tr>
<th>Nr.</th>
<th>Waterway</th>
<th>Where</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Transition Nieuwe Meer / Schinkel</td>
<td>Bridge A10 North, eastbound traffic</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>2</td>
<td>Schinkel</td>
<td>Railway Amsterdam Zuid - Schipol</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>3</td>
<td>Schinkel</td>
<td>Railway Amsterdam Zuid - Schipol</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>4</td>
<td>Schinkel</td>
<td>Metro, line 50</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>5</td>
<td>Schinkel</td>
<td>A10, westbound traffic</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>6</td>
<td>Schinkel</td>
<td>Bicycle path 1 across the Schinkel, that can be moved</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>7¹</td>
<td>Schinkel</td>
<td>Bicycle path 2 across the Schinkel, that can be moved</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
</tbody>
</table>

¹ In between breach (*pirtsa*) 6 and 7 is the Nieuwe Meersluis. This is not a breach (*pirtsa*)
<table>
<thead>
<tr>
<th></th>
<th>Schinkel</th>
<th>Zeilstraat</th>
<th>&quot;Sasportas&quot; bridge</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Schinkel</td>
<td>Theophile de Bockstraat</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>10</td>
<td>Schinkel</td>
<td>Overtoom</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>11</td>
<td>Kostverlorenvaart</td>
<td>Kinkerbrug / Kinkerstraat</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>12</td>
<td>Kostverlorenvaart</td>
<td>Wiegbrug / de Clerqstraat</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>13</td>
<td>Kostverlorenvaart</td>
<td>Beltbrug / 2e Hugo de Grootstraat</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>14</td>
<td>Kostverlorenvaart</td>
<td>v. Hallstraat</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>15</td>
<td>Kattensloot</td>
<td>Kattensloot / Nassaukade</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>16</td>
<td>Westerkanaal</td>
<td>Willemspoort / Haarlemmerweg</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>17</td>
<td>Westerkanaal</td>
<td>Railway bridge 1, Railway Amsterdam Centraal - Amsterdam Sloterdijk</td>
<td>&quot;Sasportas&quot; bridge in the train tracks</td>
</tr>
<tr>
<td>18</td>
<td>Westerkanaal</td>
<td>Railway bridge 2, Railway Amsterdam Centraal - Amsterdam Sloterdijk</td>
<td>&quot;Sasportas&quot; bridge in the train tracks</td>
</tr>
<tr>
<td>19</td>
<td>Westerkanaal</td>
<td>Railway bridge 3, Railway Amsterdam Centraal - Amsterdam Sloterdijk</td>
<td>&quot;Sasportas&quot; bridge in the train tracks</td>
</tr>
<tr>
<td>20</td>
<td>Westerkanaal / IJ</td>
<td>Tasmankade / Westerkeersluisbrug</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>21</td>
<td>IJ</td>
<td>Tunnel Noord-Zuidlijn, metroAmsterdam</td>
<td>There is an internal door that closes the tunnel</td>
</tr>
<tr>
<td>22</td>
<td>Oosterdok / IJ</td>
<td>Oosterdoksbrug / Piet Heinkade, traffic bridge</td>
<td>“Sasportas” bridge</td>
</tr>
<tr>
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<tr>
<td>23</td>
<td>Oosterdok</td>
<td>Oosterdoksbrug / Piet Heinkade, railway bridge 1</td>
<td>“Sasportas” bridge</td>
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<tr>
<td>24</td>
<td>Oosterdok</td>
<td>Oosterdoksbrug / Piet Heinkade, traffic bridge 2</td>
<td>“Sasportas” bridge</td>
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<td>25</td>
<td>Oosterdok</td>
<td>Oosterdoksbrug / Piet Heinkade, traffic bridge 3</td>
<td>“Sasportas” bridge</td>
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<tr>
<td>26</td>
<td>Oosterdok</td>
<td>Swinging bridge in bicycle path</td>
<td>“Sasportas” bridge</td>
</tr>
<tr>
<td>27</td>
<td>Oosterdok</td>
<td>IJ-tunnel</td>
<td>Pi tikra yored vesotem</td>
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<tr>
<td>28</td>
<td>Oosterdok / Schippersgracht</td>
<td>Kortjewantsbrug / Kattenbrug</td>
<td>“Sasportas” bridge</td>
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<tr>
<td>29</td>
<td>Scharrebiersluis / Schippersgracht Laagte Kadijk / Rapenburgersluis</td>
<td>Scharrebiersluis</td>
<td>“Sasportas” bridge</td>
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<tr>
<td>30</td>
<td>Nieuwe Herengracht</td>
<td>Latjesbrug / Anne Frankstraat</td>
<td>“Sasportas” bridge</td>
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<tr>
<td>31</td>
<td>Nieuwe Herengracht</td>
<td>Hortus / Muiderstraat</td>
<td>“Sasportas” bridge</td>
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<tr>
<td>32</td>
<td>Nieuwe Herengracht</td>
<td>Vaz Diasbrug / Weesperstraat</td>
<td>“Sasportas” bridge</td>
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<tr>
<td>33</td>
<td>Amstel / Nieuwe Herengracht</td>
<td>Walter Susskindbrug / Amstel</td>
<td>“Sasportas” bridge</td>
</tr>
<tr>
<td>34</td>
<td>Amstel</td>
<td>Magere brug / Kerkstraat</td>
<td>“Sasportas” bridge</td>
</tr>
<tr>
<td>No.</td>
<td>Location</td>
<td>Description</td>
<td>Note</td>
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<tr>
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<tr>
<td>35</td>
<td>Amstel</td>
<td>Hogesluis / Sarphatiestraat</td>
<td>&quot;Sasportas&quot; bridge</td>
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<tr>
<td>36</td>
<td>Amstel</td>
<td>Torontobrug / Stadhouderskade</td>
<td>&quot;Sasportas&quot; bridge</td>
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<tr>
<td>37</td>
<td>Amstel</td>
<td>Nieuwe Amstelbrug / Ceintuurbaanbrug</td>
<td>&quot;Sasportas&quot; bridge</td>
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<tr>
<td>38</td>
<td>Amstel</td>
<td>Berlagebrug</td>
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<td>39</td>
<td>Amstel</td>
<td>Utrechtsebrug</td>
<td>Delet hareuya lehinael</td>
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<td>40</td>
<td>Amstel</td>
<td>Bridge A10 North, westbound traffic, ANWB-portal</td>
<td>Tzurat hapetach with kane akum</td>
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<tr>
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<td>Rozenoordbrug, metro GVB</td>
<td>Delet hareuya lehinael</td>
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<td>Rozenoordbrug, train bridge 1</td>
<td>Tzurat hapetach</td>
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<td>43</td>
<td>Amstel</td>
<td>Rozenoordbrug, train bridge 2</td>
<td>Tzurat hapetach</td>
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<tr>
<td>44</td>
<td>Amstel</td>
<td>Bridge A10 South, eastbound traffic, ANWB-portal</td>
<td>Tzurat hapetach with kane akum</td>
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<tr>
<td>45</td>
<td>Amstel</td>
<td>Bicycle path</td>
<td>Delet hareuya lehinael</td>
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<tr>
<td>46</td>
<td>Amstel</td>
<td>Ouderkerk a/d Amstel N 522</td>
<td>&quot;Sasportas&quot; bridge</td>
</tr>
<tr>
<td>47</td>
<td>Amstel</td>
<td>Bridge in A9 near Ouderkerk, ANWB-Portal across highway</td>
<td>Tzurat hapetach with kane akum and tel hamitlaket</td>
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<tr>
<td>48</td>
<td>Amstel Uithoorn / Nes aan de Amstel</td>
<td>Aquaduct in N201</td>
<td>Blocking doors and Tzurat hapetach</td>
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<tr>
<td>49</td>
<td>Amstel Uithoorn</td>
<td>Turning bus bridge</td>
<td>“Sasportas” bridge</td>
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<tr>
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<tr>
<td>50</td>
<td>Amstel Uithoorn</td>
<td>Prinses Irenebrug</td>
<td>“Sasportas” bridge</td>
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<tr>
<td>51</td>
<td>Amstel Vrouwenakker</td>
<td>Vrouwenakker</td>
<td>“Sasportas” bridge</td>
</tr>
<tr>
<td>52</td>
<td>Amstel / Drecht</td>
<td>Tolhuissluizen</td>
<td>The bridge opens to both sides “Sasportas” bridge</td>
</tr>
<tr>
<td>53</td>
<td>Drecht Bilderdam</td>
<td>Bilderdamsebrug</td>
<td>“Sasportas” bridge</td>
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<td>54</td>
<td>Drecht Leimuiden</td>
<td>Provincialeweg N207</td>
<td>Tzurat hapetach</td>
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<td>55</td>
<td>Leimuiden, Drecht</td>
<td>Tolbrug</td>
<td>“Sasportas” bridge</td>
</tr>
<tr>
<td>56</td>
<td>Leimuiden, Ringvaart</td>
<td>Leimuiderbrug, bridge 1</td>
<td>“Sasportas” bridge</td>
</tr>
<tr>
<td>57</td>
<td>Leimuiden, Ringvaart</td>
<td>Leimuiderbrug, bridge 2</td>
<td>“Sasportas” bridge</td>
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<tr>
<td>58</td>
<td>Aalsmeer, Ringvaart</td>
<td>Aalsmeederbrug, bridge 1</td>
<td>“Sasportas” bridge</td>
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<td>59</td>
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<td>Aalsmeederbrug, bridge 2</td>
<td>“Sasportas” bridge</td>
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<tr>
<td>60</td>
<td>Schiphol-Oost, Ringvaart</td>
<td>Waterwolfunnel in N201</td>
<td>Tzurat hapetach</td>
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<tr>
<td>61</td>
<td>Schiphol-Oost / Amstelveen, Ringvaart</td>
<td>Bosrandbrug N231, bridge 1</td>
<td>“Sasportas” bridge</td>
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<tr>
<td>62</td>
<td>Schiphol-Oost / Amstelveen Ringvaart</td>
<td>Bosrandbrug N231, bridge 2</td>
<td>“Sasportas” bridge</td>
</tr>
<tr>
<td>63</td>
<td>Schiphol-Oost, Ringvaart</td>
<td>Schiphol draaibrug, Burgemeester Colijnweg</td>
<td>A small swinging “Sasportas” bridge</td>
</tr>
<tr>
<td>64</td>
<td>Ringvaart</td>
<td>Schiphol Basculebrug (A9)</td>
<td>“Sasportas” bridge</td>
</tr>
</tbody>
</table>