

# Kit Guide: Persian Army 1.0.

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The men who served in the army were the following: the Persians were equipped in this way: they wore on their heads loose caps called tiaras, and on their bodies embroidered sleeved tunics, with scales of iron like the scales of fish in appearance, and trousers on their legs; for shields they had wicker bucklers, with quivers hanging beneath them; they carried short spears, long bows, and reed arrows, and daggers that hung from the girdle by the right thigh.

Herodotus 7.61.1.



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## Introduction

This kit guide is intended to give members guidance of what kinds of clothing, armour, and weapons they should aim to achieve whilst portraying members of the Achaemenid Persian army of the early 5th century BCE. There will be a separate kit guide for women.

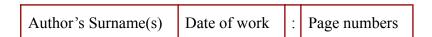
A key principle of re-enactment is 'authenticity'. In Immortals this term refers to efforts to create items of dress, armour, and weapons (from this point called 'kit') as close to the original historical items as possible. As we are re-enacting such an ancient time period, there are very few items which have survived in their complete form from the Achaemenid period. So we have to rely on visual representations and textual sources to fill out our knowledge. This is why we rely on the experts, and this kit guide has been distilled from their work to make it as accessible as possible.

In addition, there are cases within this kit guide where we aren't sure about the construction of the garment. In these cases, please feel free to experiment, and in future versions of this kit guide we will take those experiments into account.

Equally, we understand the cost and inaccessibility of certain items for portraying Achaemenid Persia. We are therefore a little flexible on some items, but ALWAYS consult an author of the kit guide, or a member of the committee if you are unsure about an item before purchasing it. We don't want you to spend oodles of money on an item that just about fits the item description, when there may be a cheaper, more accurate version available to you.

This kit guide is full of urls and hyperlinks. Anything underlined and blue will take you to the source where we got the information from, and all of the images will take you to where we got them from. In some instances the links will take you to other Immortals documents, particularly if discussing training practices or the constitution.

A final note on the footnotes. We have included citations and references for where we got the information. In footnotes this is in the format of:



At the end of the kit guide is a full bibliography of everything that we used, including books, photos, and websites. If there is any reference that does not make sense, or a link that does not work, please contact one of the authors and we'll fix it.



## A living document

This document is intended to be added to and improved over time. As academic research improves over time, the goal is that this document will be added to and updated to reflect that. Always check the most up-to-date version, and consult that. If you're in doubt about which version is most current, ask a member of the committee.

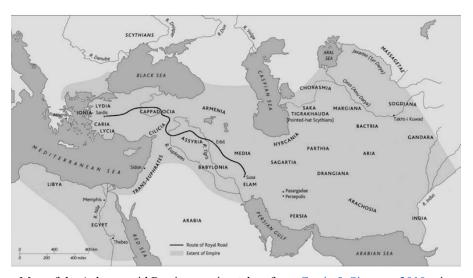


## Historical Background

This section is intended to give only a brief overview of the Achaemenid Persian period. If you would like to read more, have a look at:

- Briant, P. (2002) From Cyrus to Alexander. A History of the Persian Empire. Translated by P. T. Daniels. Winona Lake, Ind: Eisenbrauns.
- Brosius, M., 2006. The Persians. An Introduction, Peoples of the Ancient World. Routledge/Taylor & Francis Group, London and New York.
- Waters, M. (2013) Ancient Persia: A Concise History of the Achaemenid Empire, 550–330 BCE. Cambridge: Cambridge University Press. doi: 10.1017/CBO9780511841880.
- Wiesehöfer, J., 2001. Ancient Persia from 550 BC to 650 AD. I.B. Tauris, London;
   New York.
- Zarghamee, R., 2013. Discovering Cyrus. The Persian Conqueror Astride the Ancient World, Iran's Age of Empire. Mage Publishers, Washington DC.

The Achaemenid Persian empire was from 559 to 330 BCE,<sup>1</sup> and at its height spanned from Afghanistan to Egypt.<sup>2</sup> It was founded by Cyrus the Great in 539, but most of the events we will participate in will focus on the Greco-Persian wars that happened in the early fifth century BCE. There were several capital cities: Persepolis,<sup>3</sup> Pasargadae,<sup>4</sup> and Ecbatana<sup>5</sup>. An important element of administering such a huge area was the system of royal roads that were essentially ancient highways that connected the empire together.<sup>6</sup>



Map of the Achaemenid Persian empire, taken from <u>Curtis & Simpson 2010</u>: xiv.

<sup>&</sup>lt;sup>1</sup> From this point on, all dates are going to be in BCE. If you need a timeline to help visualise when this period is in relation to other cultures, check out the <u>Oriental Institute's cross-cultural timeline</u>.

<sup>&</sup>lt;sup>2</sup> Wiesehöfer 2001: 1.

<sup>&</sup>lt;sup>3</sup> Wiesehöfer 2001: 21-26.

<sup>&</sup>lt;sup>4</sup> Wiesehöfer 2001: 26.

<sup>&</sup>lt;sup>5</sup> Wiesehöfer 2001: 49.

<sup>&</sup>lt;sup>6</sup> Brosius 2006: 53-58.



A key characteristic of the Persian empire was its multicultural nature.<sup>7</sup> There were lots of different peoples who were ruled by the Persian kings, and they were never forced to conform to Persian norms and customs.<sup>8</sup>

This kit guide is going to focus on the kit used by Persian soldiers from the Persian homeland. Future guides will expand to include kit worn by other groups like women, children, and peoples from across the empire.

Key event	Date (BCE)
Cyrus	539-530
Cambyses	530-522
<u>Darius I</u>	521-486
Battle of Marathon	490
Xerxes	486-465
Battle of Thermopylae	480
Battle of Salamis	479
Battle of Plataea	479
Darius III	336-330
Alexander the Great conquering Persia	330

<sup>&</sup>lt;sup>7</sup> Even Herodotus noticed this, and listed 46 nations under the rule of Persia (<u>Herodotus 7.61-81</u>).

<sup>&</sup>lt;sup>8</sup> Brosius 2006: 47, 50.



## Safety Kit

During any combat activity members are expected to wear safety kit at all times. A detailed description of what this means can be found in the <u>Soldier's Handbook</u>.

In order to be safe on the battlefield, some compromises have to be made in terms of authenticity. This includes using equipment which may not have existed (such as protective gloves and helmets for those who would not have been able to afford a helmet). In these circumstances, protective equipment should be hidden under authentic pieces of clothing, or should be made to look as if they *could* have existed during this period.

For this reason, the committee takes the position that so long as a piece of safety equipment is both safe and looks like it could have existed, it will be allowed. However, if a member can source an authentic version of safety equipment, they are encouraged to use that (so long as it is deemed safe).

This principle carries through to weapons. They must adhere to the guidelines in the <u>Soldier's Handbook</u>, but they should look as 'authentic' as possible.



## **Colours**



A key aspect of recreating history is choosing the right colour for your clothing. Remember that you DO NOT HAVE TO BE DRAB! A mummy who was <u>crushed in a salt mine in Chehr Abad</u> had a strip of woven fabric that was in bright colours: blue, yellow, and red.<sup>9</sup>

But there are some general rules to think about when picking a colour for the type of person you want to portray. Generally speaking, the more processing required, the more expensive the fabric. So white wool dyed to be yellow will be easy to make, as it takes dye easily, but linen dyed to be bright blue is much harder to achieve (it needs to be bleached, then dyed multiple times to get the right shade).

There is one restriction: purple. It was such an expensive colour that it was only really worn by the king.



In terms of patterns, we aren't entirely sure how these were applied to the fabrics. Many were probably woven into the fabric, but because this is basically impossible for us to achieve (unless one of you is holding out on me and has a floor loom), you can also use embroidery and applique techniques to achieve the correct 'look'. Small discs of decoration on high or elite status garments can also be plaques of metal. 11

<sup>&</sup>lt;sup>9</sup> Hadian et al. 2012: 162.

<sup>&</sup>lt;sup>10</sup> For an example of an Achaemenid textile that was embroidered, see <u>Grömer and Bagherpour 2018</u>: 113

<sup>11</sup> Goldman 1991: 85.



Remember that the more patterns, the more work has gone into the garment, and so the more expensive it would have been, and the higher status you are.

#### Unit colours

We have three geographic units in Immortals: Persian, Anatolian, and Egyptian. The Persian unit was based in the Persian heartland in the South of Iran (the modern Fars region), and can be roughly described as the 'Medes' in Herodotus. This unit will be red and yellow, and this should be the first set of kit you aim for.

The Anatolian unit is based in modern-day Turkey. If you wish to portray an Ionian Greek (for which there will be a separate kit guide), this is where you will be deployed. The uni colours for this unit will be blue and orange.

Finally, we have the Egyptian unit. This includes all the soldiers stationed in Egypt, and their colours are white and black.

Unit	Colours	
Persia	Red and yellow	
Anatolia	Blue and orange	
Egypt	Black and white	

These colours are not based on history, but are pragmatic decisions for what was easiest to be seen on the field and for an audience to understand.

An important note is that even though you may be in a unit based on a geographic region, soldiers from across the empire could be in any unit. A famous example is the Judean unit stationed in Elephantine in Egypt. They were soldiers originally from modern Israel, but were stationed in Egypt, and would have fought in the Egyptian unit.



## Unit Type:

This table is intended as a type of index. Look through the table and see what unit type and status you would like to portray on the battlefield. The rows are the unit types, and the columns are the statuses (Low, Middle, High, and Elite). Not every unit type is available as every status. In these cases, they are noted as N/A.

Once you've selected the unit type and status you want to portray, you can look at the relevant box. Each item is linked to the relevant section in the kit guide. Therefore, 'Tiara' will link to the Tiara section. If this doesn't work on your device, try on your laptop or computer, and you can always use the contents at the beginning of the kit guide. At the end of each section is a link that will take you back to this table.

When using this table, whatever is mandatory for the previous status (e.g. low) is included as mandatory for the next highest status. So if you want to portray a Middle Status Infantry, you would have to use everything under the 'Mandatory' category from the Middle and Low Status boxes.

Please also remember that higher status soldiers are expected to have mandatory/basic equipment elements of a higher quality with more embellishments/colour than lower statuses.

Please note that this table is intended for units on the battlefield, and not for living history. Be sure to also read the <u>court dress</u>, <u>gaunaka</u>, <u>jewellery</u>, and <u>underwear</u> sections so you can see all of your options for a show.

	Low	Middle	High	Elite
Archer	Mandatory: Cavalry dress, tiara or hat, ankle shoes or boots or sandals, belt, recurve bow, quiver, arrows, knife/dagger.	Mandatory: Body armour: quilted or linothorax (little to no scales).  Optional: Two-handed spear, second knife/dagger, OR an axe, jewellery.	Mandatory: Body armour - iron scale, jewellery.  Optional: Two-handed spear, second knife/dagger OR sword, OR axe	N/A
Infantry	Mandatory: Cavalry dress, tiara or hat, ankle shoes or boots or sandals, belt,	Mandatory: Body armour: quilted or linothorax (little to no scales).  Optional:	Mandatory: Body armour - iron scale, jewellery.  Optional: Two-handed	N/A



	Shield with cut-outs, single-handed spear, knife/dagger.  Optional: Swap shield and single-handed spear for two-handed spear.	Swap shield and single-handed spear for two-handed spear, jewellery, second knife/dagger OR axe.	spear, second knife/dagger OR sword OR axe	
Sparabara	N/A	Mandatory: Cavalry dress, tiara, ankle shoes or boots or sandals, belt, knife/dagger, body armour: quilted or linothorax (little to no scales). Spara shield, single/two-handed spear.  Optional: Second knife/dagger OR axe, jewellery. You can swap the tiara for a hat.	Mandatory: Body armour - iron scale.  Optional: Second knife/dagger OR sword OR axe	N/A
Slinger	Mandatory: Cavalry dress, tiara or hat. ankle shoes or boots or sandals, belt, sling, 'stones' & stone bag.	Optional: Recurve bow, quiver, knife/dagger, second knife/dagger OR axe, jewellery.	N/A	N/A
Javelinman	Mandatory: Cavalry dress, tiara or hat, ankle shoes or boots or sandals,	Optional: Second knife/dagger OR axe OR sword. FOR LEADERS OF	N/A	N/A



	belt, javelins, knife/dagger.	SKIRMISHERS: body armour: quilted or linothorax (little to no scales), jewellery.		
Immortal	N/A	N/A	Mandatory: Cavalry dress, tiara or hat, ankle shoes or boots or sandals, belt, knife/dagger, akinakes, body-armour (iron scale) BETWEEN ONE AND TWO OF: recurve bow and quiver, arrows, two-handed spear, shield with cut-outs and single-handed spear, jewellery.  Optional: Second knife/dagger OR axe, visible helmet. You can swap the tiara for a hat.	Mandatory: Visible helmet, second knife/dagger OR axe.
Commande	N/A	N/A	Mandatory: Cavalry dress, tiara or hat, ankle shoes or boots or sandals, belt, knife/dagger, akinakes, shield with cut-outs, body-armour: iron	Mandatory: Second knife/dagger OR axe  Optional: Single-handed spear/two-hand ed spear



			scale, visible helmet, jewellery. IF ARCHER COMMANDER: Bow, quiver, arrows. Optional: single-handed spear/two-handed spear, second knife/dagger OR axe	
Banner bearer	N/A	Mandatory: Cavalry dress, tiara or hat, ankle shoes or boots or sandals, belt, knife/dagger, body armour - quilted or linothorax (little to no scales).  Optional: Shield with cut-outs OR bow, quiver, arrows, jewellery.	Mandatory: Body-armour - iron scale, visible helmet.  Optional: Akinakes OR second knife/dagger Or axe, shield with cut-outs.	Mandatory: Akinakes OR second knife/dagger OR axe  Optional: Shield with cut-outs.



## Soft kit

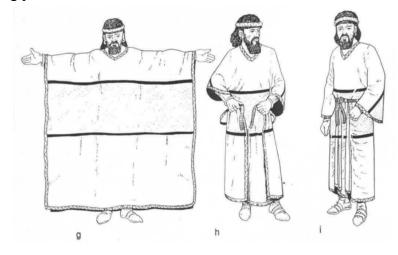
'Soft kit' in this kit guide refers to items of clothing, as opposed to armour, shields, and weapons.

## **Court Dress**

This refers to the elaborate dress worn by the men of the Achaemenid court. Kings, courtiers, and bodyguards wore this dress. You will see this a lot on palace reliefs, but they don't necessarily reflect the reality of what troops (particularly archers) wore on the battlefield.<sup>12</sup> This would not be worn on the field, and should therefore be seen as living history clothing only.



This item of clothing covered the body head to toe, and had voluminous sleeves. Cinched in at the waist, the garment hung in folds and reached the ankles. The construction is still confusing to scholars, and will need a little bit of experimentation. Head suggests this, so will be a good starting point:<sup>13</sup>



<sup>&</sup>lt;sup>12</sup> Sekunda 1992: 12-13.

<sup>&</sup>lt;sup>13</sup> Head 1992: 19.



There was likely some form of underclothing under this, but there aren't any detailed images surviving from the period. So we can assume there was likely a short tunic of some kind underneath. It's therefore recommended to wear at least modern underwear underneath, in order to prevent any 'accidents' in living history.

It's really important to remember that the reliefs would have been painted, and a lot of detail has disappeared over the years. But these glazed bricks from Susa give an idea of the colour and decorations which could be on the court dress:



The key to this is that the colour of the shoulders and the skirt are the same, whilst the flowing sleeves are a different decoration. And don't be afraid to add details - in fact, the more detail the better!

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## **Cavalry Dress**

They wear the Median dress, thinking it more beautiful than their own...

<u>Herodotus 1.135.1</u>.



The Medes in the army were equipped like the Persians; indeed, that fashion of armor is Median, not Persian.

Herodotus 7.62.1.

'Median' dress is an oversimplification by Greeks, and probably referred to riding dress or attire.<sup>14</sup> This type of costume is common in this period on depictions of people from the northern steppe provinces of the empire, such as the Skythians, Cappadocians, Sagartians, Medians, and Armenians. These peoples have a strong horse-riding culture, alongside the Persians. So in this section we talk about cavalry dress when the Greek sources use the term 'Median'.

But what did cavalry dress look like? It was a lot simpler than the Persian <u>court dress</u>. It was a knee-length tunic that had long sleeves, and simple trousers. See the sections on <u>belts</u>, <u>head coverings</u>, <u>shoes</u>, and <u>jewellery</u> for how to complete the look.



The reliefs from Persepolis don't have the intricate painted details they once had, but some gold votive plaques and a golden toy of a rider give an idea of what kind of decorations there could be.

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<sup>&</sup>lt;sup>14</sup> Llewellyn-Jones 2021a.



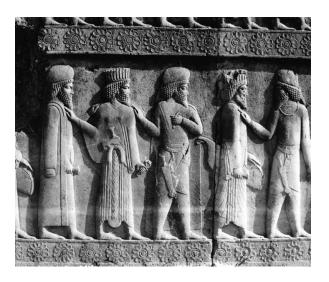




There are bands of geometric patterning across the top of the shoulders, along the line of the top of the shoulders, along the bottom hem of the tunic, and vertically down the front and back of the tunic.

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## Gaunaka



The gaunaka was a coat worn with the <u>cavalry dress</u>. It was a status symbol within Persian society, indicating nobility, and was tied to their traditions as a semi-nomadic horse-riding culture.

The gaunaka could hang off the shoulders and be worn like a cloak. The coat was kept in place with good tailoring and a tie across the neck or chest. The garment could be made from a range of textiles, including linen, wool, cotton, twill, leather and fur.



The sleeves in Persian gaunakas were over-wide and over-long to being too narrow and long to be used. The coat is always shown with decorative lapels and cuffs that could be highly decorated, like on these Oxus figures:



For high/elite status figures, these coats should include applique and embroidery, with vibrant colours to demonstrate status or patronage.



We have a <u>pattern</u> for this piece of clothing available to download.

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## **Shoes**

There are three options for footwear: <u>boots</u>, <u>ankle shoes</u>, or <u>sandals</u>. For safety reasons you must always wear footwear (see the <u>Soldier's Handbook</u>).



#### **Boots**



This image is a 3D reconstruction of a boot found on the right leg of a mummy who was crushed in a salt mine at Chehr Abad. The mummy dates to the Achaemenid period, and you can see this boot reaches up the calf (although we don't know how far up the leg it goes). Most of the construction is like a sock, except with extra reinforcing at the heel, and a small amount of lacing at the front of the ankle. These should be worn with <u>cavalry dress</u>.

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#### Ankle shoes



An option for either <u>cavalry</u> or <u>court dress</u> is a shoe similar to the <u>boot</u> above, but doesn't continue above the ankle. You can just about see in this glazed frieze that there should be some sort of lacing that wraps around the foot to keep the shoe in place.

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<sup>&</sup>lt;sup>15</sup> Öhrström et al. 2015: 815.



#### Sandals

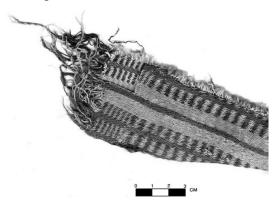


Your last option is some sandals. These would have a leather strap around the ankle, and then a strap coming down the front of the foot and between the toes, attaching it to the sole. There are also additional straps at either side to ensure the sandal stays in place.

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### **Belts**

One option for a belt is a woven piece of cloth.



You can also have a belt made of leather. One end had a hole, and the other was looped through and tied off. This relief also suggests more than one belt could be worn at once, or the leather belt was long enough to be wrapped around the body twice.



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#### Underwear

We don't know anything about whether the Persian army would have worn underclothes. I would recommend wearing a light tunic under the court dress, just to preserve this very expensive piece of clothing.

This does not mean you get a free pass - if I, Ellie, a woman, have to wear underwear, you all have to as well. Flashing the audience is not acceptable. Please keep these as plain as possible, and ideally in neutral colours to prevent them from being spotted by the audience.

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## Head coverings

There is a huge variety of head coverings that can be worn by Persian soldiers. The hats are part of the way Persian artists depicted different peoples across the empire, so this section focuses on the hats worn by Persians.

Wearing a hat is more of a practicality, so there's no requirement to wear one in the living history camp. You should wear one if you have hair that is not authentic, such as dyed in unnatural colours.

However, on the battlefield you have to wear something on your head. You can choose one of the <u>helmets</u> if it's appropriate to your status or role on the field, or one of these hats covering some sort of head protection as outlined in the <u>Soldier's Handbook</u>.

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#### Tiara





The tiara is the most famous piece of clothing for the Persians. It's not like a modern tiara (a dainty tiny crown), but a hat that covered your head, the back of your neck, and had long flaps that wrapped around your lower face. It was then secured in place with an additional strip of fabric that wrapped around the head and was tied at the front of the head. The important part of the hat was the 'phrygian' shape of the top of the cap. It was then folded over to one side, and could be secured in place by the fabric tie.

The tiara itself was made of fabric, but if you want to experiment there is a suggestion that it was made from the leather of a bull's scrotum. <sup>16</sup> Get in touch if any experimentation works!

This hat is the most common worn for <u>cavalry dress</u>.

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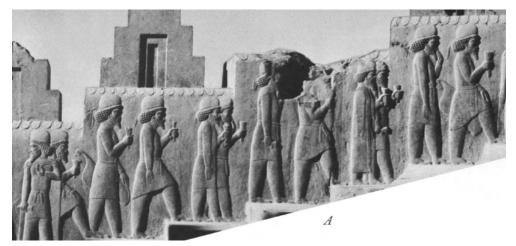
Immortals Kit Guide 1.0.

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<sup>&</sup>lt;sup>16</sup> Benda-Weber 2014: 103-104.



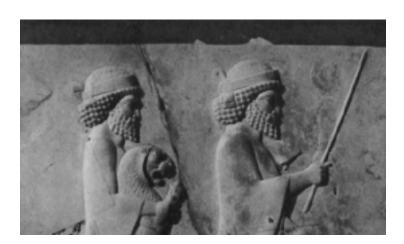
### Bulbous hat



A hat that is only seen worn by those in <u>cavalry dress</u> is the 'bulbous' hat. It looks like a dome over the head, and again we don't know what it was made out of. Again, feel free to experiment until you find something that works.

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#### Diadem



A 'diadem' just refers to any band that goes around the head. The image above shows a strip of fabric (you can just about see that it was knotted at the back of the head). A diadem can be worn with a <u>tiara</u> in <u>cavalry dress</u>, or without one in <u>court dress</u>.

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### Twisted headband



This type of headdress is similar to a <u>diadem</u>, but the band is in a twisted pattern. This may be a piece of fabric twisted to form this pattern, or a piece of metal patterned this way. We simply don't know. Feel free to experiment!

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## Tall pillarbox-type hat



This type of hat was a tall cylindrical hat. We don't know what it was made out of, but it was clearly stiff enough to stand upright. Only those in <u>court dress</u> are depicted wearing it.

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#### Fluted hats



This is very similar to the <u>pillar-box hat</u>, but instead of smooth sides it is depicted with vertical lines. These could be pleats, indentations, or possible feathers. We simply don't know, so feel free to experiment until you find something that works! It's only depicted on individuals wearing <u>court dress</u>.

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## Jewellery

There are four main types of jewellery you can wear: <u>bracelets</u>, <u>rings</u>, <u>earrings</u>, and <u>necklaces</u>. The main archaeological finds are from burials, so most of the examples are insanely extravagant and made of gold, but less-expensive metals are also acceptable. All of these could be worn by men and women.

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#### **Bracelets**



These were largely torques that looked like they coiled around your wrist. They varied in their decoration, from very simple and mostly plain, to extremely over the top with fully-sculpted griffons.





Totally impractical, and only for the wealthiest, but I can't resist including it!

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## Rings



The rings that have been found look like modern 'signet rings'. They have a flat disk with a specific pattern, and this would have been used to 'sign' documents by pressing the ring into the clay. Others had colours inlaid in them.

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#### Necklaces

Necklaces were made of strings with beads made of polished precious stones and metals. This included lapis lazuli, carnelian, and banded agate.



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## Earrings

These were relatively simple pieces of jewellery. They were based on a simple, small hoop, but sometimes could have decoration dangling from the hoop.



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## Armour

Herodotus and Pausanias, two Greek sources, said that the Persians didn't wear much armour.<sup>17</sup> They were wrong. The Persians wore plenty of armour!<sup>18</sup> In this section we're going to talk about the items worn to protect Persian soldiers during battle. This doesn't include <u>shields</u> - they have their own section.

### Linothorax





The majority of the armour depicted on Greek vases is in a similar construction to that of the Greek linothorax.<sup>19</sup>

Herodotus claims the Persians copied their armour from the 'egyptian cuirass':

They wear the Median dress, thinking it more beautiful than their own, and the Egyptian cuirass in war.

<u>Herodotus 1.135.1</u>.

<sup>&</sup>lt;sup>17</sup> Herodotus 9.63.2, Pausanias 1.40.2-3.

<sup>&</sup>lt;sup>18</sup> Charles 2012. There is a little bit of textual evidence to suggest that some Persians may have worn their armour under their tunic, however there is enough evidence of Persian infantry who did not do this

<sup>&</sup>lt;sup>19</sup> There is some debate as to how accurate the Greeks were when depicting this armour on the Persians.



This was likely a cuirass with shoulder reinforcement.<sup>20</sup> However, we have little evidence to indicate the construction.

The materials used to make such a cuirass could be varied. Xenophon describes the armour of cavalrymen being constructed of scales and felt:<sup>21</sup>

And Abradatas's chariot with its four poles and eight horses was adorned most handsomely; and when he came to put on his linen corselet, such as they used in his country, Panthea brought him one of gold, also a helmet, arm-pieces, broad bracelets for his wrists—all of gold—and a purple tunic that hung down in folds to his feet, and a helmet-plume of hyacinth dye.

Xenophon. Cyr. 6.4.2

Textual sources that refer to egyptian cuirasses as made of linen, as well as evidence they were leather.<sup>22</sup>

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## Quilted armour

There are also interpretations of linothoraxes as potentially depicting quilted armour in Greek art:<sup>23</sup>





From the Greek depictions, this would be a short tunic with no sleeves that ended at the waist. You can then add long, thin strips of fabric (it's hard to determine what materials these were made of) to the bottom of the armour. The fabric of the armour was quilted (three layers of material stitched together to create padded armour).

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<sup>&</sup>lt;sup>20</sup> Charles 2012.

<sup>&</sup>lt;sup>21</sup> Xenophon. Cyr. 6.4.2.

<sup>&</sup>lt;sup>22</sup> See: Charles 2012, Xenophon. Cyr. 6.4.2, Herodotus 7.89.

<sup>&</sup>lt;sup>23</sup> Charles 2012.



#### Scale







Herodotus refers to the full panoply of Persian infantry soldiers who took part in the expedition of Darius in Greece, and mentions a coat of iron scales "like those of a fish":

on their bodies embroidered sleeved tunics, with scales of iron like the scales of fish in appearance

Herodotus 7.61.1.

He also describes how the Persian general Masistios wore golden scale armour under his garment/tunic, that would protect him from enemy blows. Herodotus stated the armour proved so resistant to the Athenian spears that Masistios was killed with a spear thrust to the eye:

They could not, however, kill him at first, for he was outfitted in the following manner: he wore a purple tunic over a cuirass of golden scales which was within it; thus they accomplished nothing by striking at the cuirass, until someone saw what was happening and stabbed him in the eye. Then he collapsed and died.

Herodotus 9.22.2.









Scale plates made of iron, bronze, and gold-plated have been found in excavations. The only material found as the backing is leather, but there are a great number of plate variations. The main shapes are D, square, and rectangle. Holes can be simplistic or even asymmetric, have a look at the images above to get an idea of the options/variations, and explore the lacing options.



Greek depictions of Persians have scale on a linothorax or garment covering their entire torso down to the hips.



But for the average soldier, scales were made out of iron. There is also the Uruk letter from 421 BCE describing the equipment of a soldier, including iron body armour and helmet.

So give me a horse with a groom and harness, a caparison of iron, a helmet, a leather breastplate, a buckler, 120 arrows of two sorts, an iron attachment for my buckler, two iron spears and a mina of silver for provisions, and I will fulfill the service-duties which weigh on our lands.<sup>24</sup>

Manning 2016.





For scale you can choose from the above scale designs and apply them to a leather garment covering at least the torso, from shoulders to hips. Scales may also be applied to a linothorax-type armour (see linothorax section). In terms of materials, bronze/brass (copper alloy) is perfectly accurate but iron was the material used by the majority of the soldiers.

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#### Helmets

Everyone taking part in any form of combat will need to wear a helmet of some sort, as outlined in the <u>Soldier's Handbook</u>. It is acceptable to wear protective headgear under a <u>head covering</u>. This section deals with helmets that are acceptable without a <u>head covering</u>.

Helmets were made of iron and bronze during this period:

Only the following did so: the Persians, equipped like their infantry, except that some of them wore headgear of hammered bronze and iron.

Herodotus 7.84.

A 5th century <u>Babylonian letter</u> described a "<u>hood of the armour</u>" as equipment. Xenophon specified bronze helmets (*kranea*) with white crests were worn by the staff of Cyrus the Great.<sup>25</sup>

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<sup>&</sup>lt;sup>24</sup> Read more about this translation and some of the issues with it here: https://bookandsword.com/2016/01/09/this-is-not-a-translation-of-the-gadal-iama-contract/

<sup>&</sup>lt;sup>25</sup> Also see the helmets for the cavalry of Cyrus the Younger: Xenophon, Anabasis 1.8.6.



Now all Cyrus's staff were panoplied in armour the same as his: purple tunics, bronze corselets, bronze helmets with white plumes

Xenophon Cyrop. 7.1.2

Since this was only for the elite, and no helmet or depiction of such a helmet has been preserved, this is up for interpretation.

An 'Assyrian' type helmet has been preserved that was taken from Marathon and dedicated as an offering at Olympus. It was made out of one piece of bronze, and conical in shape.



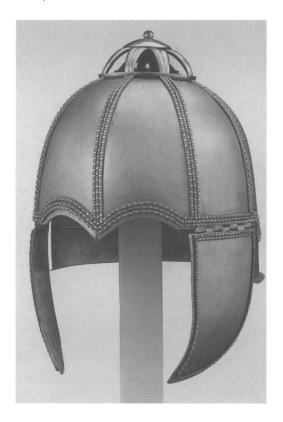
In two rare instances of Persian carvings there are helmets worn by cavalrymen. These helmets are based on the 'Assyrian' type, but one has an added nape-guard and cheek-flaps with a plume-like crest, while the other has a transverse crest.







There was also a helmet found at Sardis, made of multiple pieces of metal welded or riveted together, that dates to Cyrus's conquest of Sardis. <u>Greenewalt</u> and Heywood identify this helmet: "A Persian or Lydian association is more reasonable than any of those possibilities." Greenewalt and Heywood err on the side of the helmet being of Persian origin, given iron-working was more developed from lands previously conquered by Cyrus, than Lydia (in modern Turkey, where Sardis is).



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## Weapons

This section goes through the weapons that you can use as a member of the Persian army. Any weapon must abide by the safety guidelines as outlined in the <u>Soldier's Handbook</u>.

## Archery

Archery can be broken down into three components: Bows, Quivers, and Arrows.

#### **Bows**





There is no archaeological evidence for Achaemenid bows, so we have to rely on Persian and Greek depictions. These were all recurve bows - that means the limbs of the bow bend away from the archer when unstrung.<sup>26</sup> There were three different kinds of bow in the Persian armed forces. Persian bows were about 1m tall when strung, and Elamite bows were slightly larger at 1.4m tall.<sup>27</sup> Both of these could have decorations at the end of the limbs, especially duck heads made of horn.<sup>28</sup> There was also a bow from the Scythians, which was a double-convex bow. This means when the bow wasn't strung the limbs curve forward in the shape of a B. These were mainly seen in Greek depictions of Persian archers.<sup>29</sup> With all of these bows, they would be made of wood as a core - what type of wood and how many different kinds is up for debate, though. The side of the bow facing the archer had a strip of horn glued in place to stiffen it, and sinew was glued down the other side of the bow (the side facing the enemy).<sup>30</sup>

<sup>&</sup>lt;sup>26</sup> White 2019: 17-54.

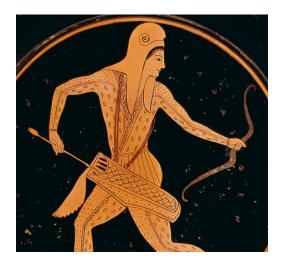
<sup>&</sup>lt;sup>27</sup> White 2019: 21.

<sup>&</sup>lt;sup>28</sup> White 2019: 28, Castelluccia 2019: 59, fig. 2.

White 2019: 29-30

<sup>30</sup> White 2019: 34-35.





In an ideal world, you'd be able to find this type of bow easily at trade fairs. We live in the real world, and we know that wet shows would destroy a bow made to these specifications. So a recurve bow that is roughly the correct size, and adheres to the safety requirements in the <a href="Soldier's Handbook">Soldier's Handbook</a> will be acceptable.

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## Quivers



There were two types of quivers in the Greek and Persian depictions of Persian archers. The first is the *gorytus*, where the bows were stored whilst strung in one pouch and <u>arrows</u> were stored in a pouch attached to the bowcase.<sup>31</sup> This was worn by Persian soldiers dressed in

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<sup>&</sup>lt;sup>31</sup> White 2019: 21.



<u>Cavalry Dress</u>, and was slung on the left hip.<sup>32</sup> They could be elaborately decorated with gold plaques on the outside. The second was a quiver worn on the back of Persians dressed in <u>Court Dress</u>. These did not include the bow case, so the bow was slung over the shoulder.<sup>33</sup> Both of these types held arrows in a closed quiver, so there was a lid or flap that covered the arrows. They were both also decorated with tassels, which may or may not have been used to clean the arrows.<sup>34</sup>

There is also the possibility of a <u>dagger</u> built into the quiver. This is conjectural, and based on this text about what Babylonians were given:<sup>35</sup>

6 bows, among which 2 Akkadian; 6 lances; 6 iron daggers of the quiver (ša tillu); 6 daggers of the loins; 6 bowcases (šallaţu), among which 2 Akkadian; 56 Akkadian arrows, among which 26 iron heads; 116 Kimmerian arrows, among which 46 iron heads; 2 pihātu-textiles; total equipment of 8 (!) bowmen.

TCL 12, 114.

With these quivers and bowcases, it's best to pick out a depiction and try to make one that looks as close as possible to the depiction. There will be a lot of trial and error in this process, so please share with the group how you made yours.

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#### Arrows

Arrows ranged from 60 to 76cm in length.<sup>36</sup> They could be made out of stiffened reeds or wood, and the arrowheads were either trilobal (with three blades and shaped like a triangle in its cross-section) or leaf-shaped.<sup>37</sup> Of course, for arrows you are going to take on the battlefield, please adhere to the <u>Soldier's Handbook</u> and have safety as a priority. You can use these guidelines for arrowheads that will be in living history displays ONLY, and only under strict supervision.

Archers were given 120 arrows by the Persian king, so try to keep your quivers as full as possible.<sup>38</sup> There is also no evidence that the feathers used to fletch the arrows were dyed, so try to keep them as natural-looking as possible.<sup>39</sup>

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<sup>32</sup> White 2019: 51.

<sup>33</sup> White 2019: 52.

<sup>&</sup>lt;sup>34</sup> White 2019: 49, 52.

<sup>&</sup>lt;sup>35</sup> TCL 12, 114.

 $<sup>\</sup>underline{https://bookandsword.com/2019/07/06/provisions-loin-girdling-and-battle-gear-in-the-long-sixth-century/}$ 

<sup>36</sup> White 2019: 31.

<sup>&</sup>lt;sup>37</sup> White 2019: 40-43.

<sup>38</sup> White 2019: 47.

<sup>&</sup>lt;sup>39</sup> White 2019: 49-50.



### **Javelins**



Javelin heads were made of iron, were leaf-shaped, with a central ridge and tang. The total length with tang is about 4.6 inches, so these javelin heads are quite small. Again, as we live in the real world, javelins with sockets are acceptable as well, but the javelin heads should be as small as possible.

It should be noted that we do not, as yet, have any evidence for the use of a shield with javelins for the Persians. Therefore, javelins should not be used with a shield when depicting Persians.



When carrying the javelins, you can have several javelins bundled up and carried over the shoulder. We don't know if this was rope, fabric, or leather, so feel free to experiment with whatever works best!

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## Slings

No slings have been found in excavations, and there are very few depictions of slingers during this period. However, we do have the ammunition left behind. Rocks that were 12-25 cm long, rugby-ball ball shaped and made of stone were used, and the sling should be made of rope and fabric.<sup>40</sup> Obviously, make sure the ammunition adheres to the safety regulations as outlined in the Soldier's Handbook.

How the sling itself is made, we will leave up to your interpretation and experimentation.

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## **Spears**



Spearheads were socketed, and had a prominent ridge on both sides down the middle. Even though <u>Herodotus says that the Persian spears were short</u>, they were still taller than the average person.

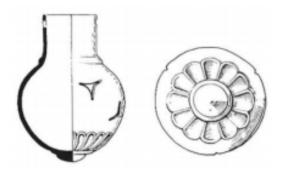


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<sup>&</sup>lt;sup>40</sup> Potts 2020:20.



If you are using a two-handed spear, you can also have a ball socketed on the bottom of your spear. These balls likely served 2 purposes, firstly as a counterweight; secondly to act as a mace head if the spear broke.



Some of these ball sockets were also used to designate guard units. Herodotus identifies some of Xerxes personal guards:

One thousand of these had golden pomegranates on their spear-shafts instead of a spike, and surrounded the rest; the nine thousand who were inside them had silver pomegranates. Those who held their spears reversed also carried golden pomegranates, and those following nearest to Xerxes had apples of gold.

Herodotus 7.41.3

Therefore, if you are portraying the Immortals, the ball at the end of the spear can be silver and decorated as more than a simple ball. If you're portraying the royal bodyguard, this ball can be gold (but brass is acceptable for this).

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#### Axes



Axes were comparatively small, with a medium to narrow blade edge. They were socketed on a wooden shaft, and the iron extended backwards into a pick or chisel edge. In Greek art they were carried by a number of different types of Persians and Skythians in varying levels of armour.







It could be this was a cheaper alternative to an akinakes, although the amount of metal involved isn't that much different. Perhaps it was specific to certain cultures within the empire but broadly attributed to the Persians, erroneously, by the Greeks. This is up for debate, as such we must make a judgement on what kind of warriors carried this weapon.

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### **Swords**

Swords were not the primary weapon of the Persian army. They were a back-up for when the soldier's spear broke. In general, this means they were for higher-status soldiers.

### Akinakes



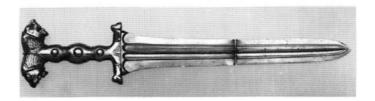
The *akinakes* is a short iron sword, with a blade around 30-40 cm. There were multiple styles of pommel, ranging from a straight perpendicular bar to the more impressive-looking gold pommel of two lion heads.<sup>41</sup> They don't seem to have had a fuller.

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<sup>&</sup>lt;sup>41</sup> Sekunda 1992: 56.





We're a bit more clear about the scabbard these swords were kept in. It was worn on the right side of the body. The core was made of wood, and then was covered in leather to be attached to the body.

For cavalry dress, they have a shape that can only be described as 'penis-shaped'. These scabbards could be covered in other, more impressive materials like embossed gold:







The scabbard had a tab on one side, that would then be attached by a loop to the soldier's belt, and the lower part of the scabbard had a length of leather that wrapped around the leg, and the end of the length was passed through a hole on the other side of the lower scabbard. The end of the length could be decorated and ended with some sort of metal embellishment.





For scabbards worn with court dress, there is a different type of scabbard available. It was worn on the right side of the body, and was tied into the belt at the waist. This means we don't know what the bottom half of the scabbard looked like, but the top had a comb-like structure that extended asymmetrically towards the back of the body. It is unknown what this structure was made of, so experiment.

We don't know if the scabbard or leather fittings would have been dyed or coloured in any way, but we're assuming that since they could be decorated IN GOLD SHEETING, then they could be dyed or painted in fun colours as well!

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### Kopis



A kopis is a type of short sword with a blade that curves forward, with a single cutting edge, a sharp point, and a broad belly towards the end of the blade. This type of weapon is excellent for cutting and hacking. If you choose to use a Kopis, it should be instead of an <u>akinakes</u> or <u>axe</u>.

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# Daggers/knives<sup>42</sup>



Babylonian letters describe the typical equipment for soldiers to take with them on campaign:

6 bows, among which 2 Akkadian; 6 lances; 6 iron daggers of the quiver (ša tillu); 6 daggers of the loins; 6 bowcases (šallaţu), among which 2 Akkadian; 56 Akkadian arrows, among which 26 iron heads; 116 Kimmerian arrows, among which 46 iron heads; 2 pihātu-textiles; total equipment of 8 (!) bowmen.

Manning 2019

This suggests that even unarmoured soldiers would carry *at least* one dagger/knife with them on campaign, and some even carried 2! This corroborates what Herodotus says:

they carried short spears, long bows, and reed arrows, and daggers that hung from the girdle by the right thigh.

Herodotus 7.61.1

The archaeological finds of these types of blades/knives had a concave blade, tang, and a rivet for a handle. The length of the blade is likely dependent on the wealth of the user, given that almost all Persian soldiers carried some sort of blade on them. Another option is a very simple, sharp, short blade riveted into a wooden handle.



<sup>&</sup>lt;sup>42</sup> It's worth noting that the textual evidence cited in this section could conflate the <u>akinakes</u> with a dagger. This is likely due to the short size of the <u>akinakes</u>, but a little bit of caution should be used when looking at ancient texts discussing Achaemenid daggers.

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Given the regular visual and textual evidence for the wearing of a dagger or <u>akinakes</u>, anyone depicting a Persian soldier (armoured or not) should ideally be carrying some form of short blade. Even low status characters should ideally aim to carry a short blade of some sort on them.

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## Shields

There are several options for shields, but we want to stress an important safety point. Many of these shields would have been made out of interwoven reeds, or wicker. We have tested wicker shields before, and do not think they are safe enough for you to use on the battlefield. We believe that these pieces of equipment would have been used once in battle and then thrown away, not used season after season (as re-enactors use shields).



Just in case you need more convincing, this was a test with a fully-authentic spara and a sharp arrow. Imagine your arm where that arrow is poking through.

So if you intend on getting one of these shields, please make them out of wood, and cover the edges with leather for safety if it is going on the field. If you want to make a wicker one for living history, then go ahead, but do not bring it on the field.

### Round shield with holes cut out



The shields have a roughly oval-shaped basic shape, with circular sut-outs centred on each side. The shields can have a central 'boss' or plate. This might be a depiction of a decorative or structural element (it is currently under debate).





The shields also look like some sort of edging material has been applied (this could also be decorative rather than structural), we recommend having some sort of edging material, such as leather, to protect the integrity of your shield, including for the inside edges of the cutouts.

These shields were held with a 2 strap system, one held in the hand and the other attached at the elbow. It is important that your shield does not expose either your hand or elbow for safety reasons.



We have a pattern on how to make this shield available.

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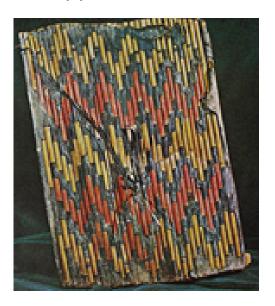


# Spara<sup>43</sup>



The spara was a large rectangular shield, and reached neck-height when it stood on the floor. It was wide enough to conceal the *sparabara* (the name of the soldier who used it). The construction is speculated on, but was likely interwoven reeds/rods with stiff leather, similar to later shields, one dated between 323 BCE and 256 CE found at Duro Europa, and another dated between the 5th and 3rd centuries BCE from Pazyryk.<sup>44</sup>





These shields were likely used as a frontline defence in front of large formations, with Greek pottery images indicating these could be propped up by a stake or pole. The role of a sparabara (or *dathapatish*) was to command a unit (*dathabam*, 10 men) of around 9 archers in

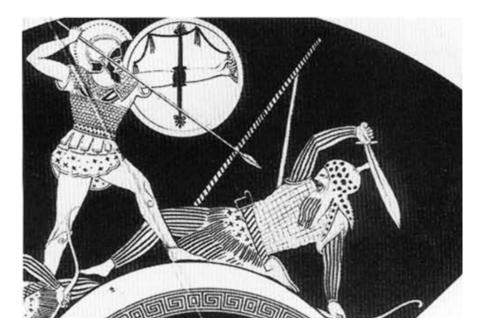
<sup>&</sup>lt;sup>43</sup> This section has clear non-Persian images, but there are a couple of Persian palace reliefs that do depict *sparabara*. You can find them in the following document:

https://drive.google.com/file/d/1iEk9cpReKOIJxdb3RQ9sEZyyX2VQlRYH/view?usp=sharing

<sup>&</sup>lt;sup>44</sup> This is the shield on the right, sent in an email to Ellie from Prof. Margaret Miller.



a column behind them.<sup>45</sup> It was the role of the sparabara to protect the *dathabam* using a spear and the spara, but they could also use a bow whilst the shield was propped up.



The grip of the shield is not well understood or clear in images, so reasonable interpretations are accepted. Suggestions include: crossed rope; a single central grip (if light enough); or leather arm straps. Shorter or thinner versions (in terms of dimensions) are accepted as we understand these must be able to be transported to a show/training. The spara should come with the prop-stick as well for deployment as a barrier to missiles.

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<sup>&</sup>lt;sup>45</sup> Sekunda 1992: 17; Charles 2012: 261 fn. 15.



## Banners



The only depiction of Persian banners from our period comes from a piece of Greek pottery.<sup>46</sup> It was a pole that had two small squares that hung from the top and had geometric designs in order to denote units. We don't know what the squares would have been made out of, but we've tried with dowling rods and fabric, and it was tied in place with leather thonging through a hole at the top of the banner pole.

An alternative that isn't completely confirmed is a bronze finial in the shape of a falcon that could have been fixed to the top of a banner pole.<sup>47</sup>



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<sup>&</sup>lt;sup>46</sup> <u>Sekunda 1992</u>: 18.

<sup>47</sup> Sekunda 1992: 48.



# Any Questions? Talk to us!

If you have any questions about the kit guide, or think something needs to be changed or added, feel free to chat to us!

You can contact us to talk about:

- Why we included certain items
- Why we excluded certain items
- Suggestions on how to make certain items
- Things you've found in your own research
- Things that disprove what we've said in this version

You can contact the authors of this version of the kit guide (Ellie Bennett, Erik Jellyman, Robert Atkinson), or the Immortals committee (Ellie Bennett, Erik Jellyman, Suzanne Tompsett-Ince, Fred Hampee, Josh Davies), or send an email to <a href="mailto:immortalsreenactmentgroup@gmail.com">immortalsreenactmentgroup@gmail.com</a>.



# Bibliography

This section is where you'll find the full details of the books and resources we've used for making this kit guide. They're organised according to the type of resource (a book, a journal article, a chapter in a book, websites, and resources Immortals have made).

Each subsection has all the resources alphabetically organised according to the surname of the author. Then the date follows, and the title of the resource used. This might be confusing if you're not used to reading bibliographies, so if you have any questions get in touch with the authors of the kit guide, or members of the Immortals committee.

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Round Shield with Holes Cut Out pattern

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