Mechanism Description of a Duo-Tang Folder

# Introduction

# The black duo-tang folder is a versatile and essential tool for organizing and storing documents with style and efficiency. With its sleek appearance, the black duo-tang folder stands out as a symbol of organization. Originally founded in 1931 by the Duo-Tang company located at Chicago [1], this folder is the perfect companion for students, professionals, or anyone who simply wants to keep their important papers in order. Its durable construction ensures that your documents stay secure and protected, while the convenient duo-tang design allows for easy access and retrieval of papers. Often used as an organization tool for multiple pages of one subject, it is mainly used by elementary school students. As they enter secondary school however, most students transition over to binders.

# Overall Description

The Duo-Tang folder, originally a brand name for paper folders, is a popular and practical tool primarily made of black durable cardstock paper with only one of its components made of metal giving off a silverish color. With a very simple design when analyzed, it is very light weighing only about 40.5 g and its dimensions are 9” x 11.5” (9 inches wide and 11.5 inches height). Designed to bind multiple sheets of paper securely, it has a very smooth touch as if you are touching cardboard and it has a rectangular shape. Figure 1 below illustrates its shape and the first component being the binder’s front cover (1) where the sticker binder slot (2) can be found. Inside, it features embedded brass fasteners (3) that are bent through the holes of the paper and folded down to keep them in place. They are located on the spine (4) of the binder. Some models of Duo-Tang folders offer three teeth on the fastener, while others have six, with two on the top, middle, and bottom. For this one, the fasteners only offer two teeth (5). Finally, the duo-tang is provided with a back cover (6) similarly to the front cover. The inside of the Duo-Tang is illustrated in Figure 2. Duo-Tang folders provide a convenient and portable solution for keeping papers organized and easily accessible, ensuring that important documents stay together and protected.

* Front Cover (1)
* Sticker Binder Slot (2)
* Fasteners (3)
* Spine (4)
* Teeth (5)
* Back Cover (6)



Figure 1: Front Cover of a Duo-Tang cover [2]

![A black folder with zippers

Description automatically generated]()

Figure 2: Inside of a Duo-Tang cover [3]

# Part-By-Part Description

The major components are described by both figures 1 and 2.

## Front Cover (1)

The front cover is a 9” x 11.5” sized black cardboard paper that is located at the front of the duo-tang. Its purpose is to cover and protect the contents of the folder. Made of cardboard, it has a smooth texture that is resilient against blunt damages, however susceptible to sharper objects that can tear it apart. This component also retains another section of the duo-tang where the student can customize their folder through the sticker binder slot (2).

## Sticker Binder Slot (2)

The sticker binder slot is a 4.2” x 2” black empty slot located near the middle of duo-tang’s front cover (1). Faintly outlined, the purpose of this component is to illustrate a slot where the student can place a sticker on the duo-tang and write on it. Generally, the student will write down its name and subject of the class. This component is not quite necessary as many students will simply omit to add a sticker on the slot. With the front complete, the duo-tang’s components to hold the sheets of paper will be covered.

## Fasteners (3)

The fasteners are three metal circles located on the spine (4) of the duo-tang. As it is made of metal, it has a more outlined texture and more rigid composition. With each circle located about 0.5” in diameter, it serves to hold the teeth (5) of the fasteners that will secure and lock any sheets of paper attached to it. These fasteners are located on a section of the duo-tang called the spine (4)

## Spine (4)

The spine is long 11.5” section of the duo-tang that connects the front and back covers (1, 6) with the fasteners. It is made of the same black cardboard material as duo-tang’s covers and offers the smooth texture that allows user for a comfortable touch. Its purpose is to act as an intermediate between the two covers (1, 6), hold the three fasteners (3) which contains the teeth (5).

## Teeth (5)

The teeth are a short 0.5” long piece of metal that is located inside of the duo-tang’s fasteners. As it is made of the same metal as the fasteners, it offers a more outlined texture and rigid composition. Generally, there are two teeth inside each fastener (3) as they are bent to keep the sheet of papers in place. With this covered, the back of the duo-tang is last component remaining.

## Back Cover (6)

Similarly to the front cover (1), the back cover is also a 9” x 11.5” sized black cardboard paper located at the back of the duo-tang. Its purpose is to cover and protect the contents of the folder.

# Conclusion

In conclusion, the duo-tang folder is a versatile and reliable tool for organizing and storing documents. With its compact construction and embedded brass fasteners (3) located at its spine (4), it securely binds multiple sheets of paper through its metal teeth (5), ensuring they stay in place. The robust 9” x 11.5” front and back covers (1, 6) of the duo-tang offers protection to the folder’s contents. Its black color appeals to many students as its cardboard finish allows for a smooth texture. While it is commonly used by elementary school students, it remains a useful organizational tool for individuals of all ages.

# Resources

[1] Wikipedia. (n.d.). *Duo-Tang*. Retrieved from Wikipedia, The Free Encyclopedia: <https://en.wikipedia.org/wiki/Duo-Tang>

[2] Staples. (n.d.). *Hilroy Report Cover - Letter-Size - Black*. Retrieved from Staples: https://www.eway.ca/en/Shopping/Product/HRY06235

[3] OfficeCo. (n.d.). *Hilroy 06235 Duo Tang Folders - Black*. Retrieved from OfficeCo: https://www.officeco.ca/product/show/id/4555