

# An Examination of the Color “Dark Mast” Found on *Titanic*

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## Introduction

Until recently there has not been very much controversy about the paint color “dark mast” found on *Titanic*. In fact, many did not even know that this color even had a name until the last few years. I have made a number of posts in different *Titanic* forums which have ignited debate, discussion, argument and controversy. It was not my intent to be provocative or to start controversies. My motivation has always been to examine evidence and draw conclusions from that evidence. I have also endeavored to be consistent in my analyses.

This article will examine the color “dark mast” which is found in various locations. The nature of the color will be discussed and defined as narrowly as possible. Documented specifications of where this paint color was applied on *Titanic* will be given. The controversial part of this article will deal with areas which may have been painted dark mast but which are not specified in any documentation that is currently available. Throughout the article, I will try to address questions and points which have sparked the most intense debate.

## Defining the color “Dark Mast”

Among modern researchers and historians, the paint color dark mast was not known by that name until relatively recently. The *Britannic* Specification Book was a document prepared jointly by the White Star Line and the shipbuilder Harland and Wolff which listed the specifications for the ship that was planned to be RMS *Britannic* (not the hospital ship modification HMHS *Britannic*). The document was fairly exhaustive in its specifications and was an extension of the similar documents prepared for *Olympic* and *Titanic*. The majority of the specifications for all three sisters were identical. Among the specifications was a section dealing with paint. In Figure 1, which is taken directly from the *Britannic* Specification Book, we can see the reference to the color dark mast.



Masts, Derricks, Posts      - - 1 - 2 -      Dark Mast

Figure 1

The color dark mast was known before the actual name was identified. From builder’s models and photos, the color was identified as a rust color. Figure 2 is an image from a motion picture taken aboard R.M.S. *Adriatic* in 1926. While the color from the motion picture is not perfect,

this rust color which we now know as dark mast is clearly seen as applied to the ship's masts. In the interest of full disclosure, this film was made with a two-color (red and blue) process. The green component is not present. However, while this photo may not represent the color dark mast perfectly, the color is not so far off that in reality it is some type of dark brown paint.



Figure 2

Another White Star Line vessel, the tender SS *Nomadic* had areas painted this same color. In 1934 *Nomadic* was sold to Societe Cerbourgeoise de Sauvetage et de Remorquage and renamed *Ingenieur Minard*. Her funnel livery was changed but other areas of *Nomadic's* original livery have remained the same. Figure 3 is a photo taken aboard which shows this same rust color.

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Figure 3

The first areas of White star Line ships identified from models as being painted this color were what are known as “dadoes”. In figure 3 we can see that the lower parts of the deckhouses and columns were painted dark mast. These lower areas are known as “dadoes”. The primary purpose for painting these lower areas a darker color than the upper white was that they didn’t show dirt as much as if the part near the deck were painted white.

Even before the *Britannic* Specification Book surfaced, it had become clear that the White Star Line had many weather deck areas with dadoes painted this color. This became important because when the color dark mast was discovered in the specification book, it was now possible to connect the name with a definite color.

Knowing what the color of the dadoes in *Titanic’s* well decks was, it was possible to see the effects of early blue-sensitive black and white film on how this color appeared. Most black and white film at the time of *Titanic* was blue-sensitive. The effect of this type of film was that it made warm colors such as reds, yellows, and oranges appear very dark. It also made blues appear almost white. Figure 4 is a photo showing the forward well deck area of *Titanic*. The well deck dadoes which were painted dark mast are clearly visible. It is also apparent that these areas appear very dark with the blue-sensitive black and white film.

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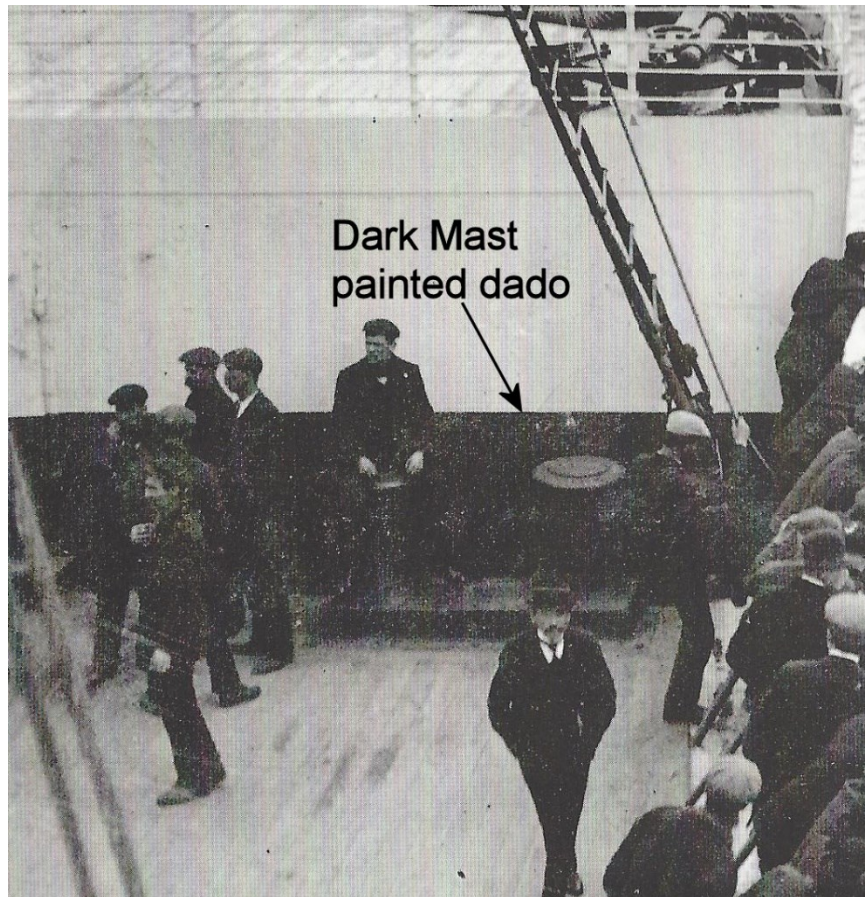


Figure 4

To further illustrate what happens to the appearance of the color dark mast when photographed by blue sensitive black and white film, Figure 3 will be used. This photo was edited to simulate what it would look like if photographed by blue-sensitive black and white film. The result is show in Figure 5. You can see how dark the dark mast areas are. This isn't a matter of altering brightness. You can see the white areas are relatively unaffected.

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Figure 5

Figure 6 shows the same photo if it were simply converted to a black and white image which would result from the use of modern black and white film.



Figure 6

A point which was raised during some online forum discussions was that if this is supposedly dark-mast then why doesn't it look very dark? The answer is that it isn't called dark mast because it is inherently dark. It is called dark mast in contrast to another color which was used below decks on *Titanic*, namely "light mast". Figure 7 shows a comparison between the color "light mast" used on *Queen Mary* and dark mast on *Adriatic*.



Figure 7

## Areas of Application

Determination of the nature of the color dark mast has been relatively easy and mostly free of controversy. When we examine the areas where this paint color was applied, we move into the heart of the controversy. This analysis will focus on three areas. The first will be the areas where we have absolute documentary evidence for its place of application. The second area will focus on those areas where we have varying degrees of evidence for the application of this paint color. The third will be those areas where we have only speculative evidence for where the color was applied.

## Documented Areas of Dark Mast Application

The documented areas for the application of the color dark mast come from the *Britannic* Specification Book. These are shown in figures 8 – 10.

Masts, Derricks, Posts - - 1 - 2 - Dark Mast

Figure 8

Bridge end Bhds.	3	-	1	-	-	-	White above dado	Note (15)
	1	-	1	-	1	-	Dark mast dado	

Figure 9

(12) The bulwarks in the wells to be painted the same as the end bulkheads.

Figure 10

There are areas below decks that are also to be painted dark mast but since this article is primarily targeted at modelers and artists, only those area visible above decks will be given. To summarize the specification book, the following areas are unmistakably specified to be painted dark mast:

Masts – foremast and mainmast

Derrick – the derrick on the after side of the foremast

Posts – it is not clear what posts are referred to. The only ones which might be applicable are the support posts in the navigating bridge.

Well deck dadoes – both forward and aft bulkheads and the port and starboard gangway dadoes.

These areas have solid documentary and photo confirmation of the application of the color dark mast.

**Special Note:** The Britannic Specification Book gives a specification for the inner surfaces of the cargo hatch coamings as dark mast but there is photo evidence on early Olympic that these areas were painted white. There is also evidence that the outer surface of Titanic’s hatch coamings was black.

## Undocumented Areas of Dark Mast Application

The undocumented areas of dark mast application fall into several categories. The first is areas where there is no documentation but there is little, if any, doubt about the presence of the color dark mast. The second is areas where there is no documentation but there is strong evidence of the application of dark mast. The third is undocumented areas where all we have is speculation about whether dark mast is applied.

The first category of undocumented areas of dark mast application is one where there is no documentation but there is little, if any, doubt about the presence of dark mast. The application areas which would fall into this category are the electric crane base and ventilator dadoes in the forward and aft well decks. Figure 11 shows the forward well deck of *Olympic*

showing the dados of a ventilator and one of the electric crane bases. There is nothing in black and white photos which would rule out dark mast application to these areas.

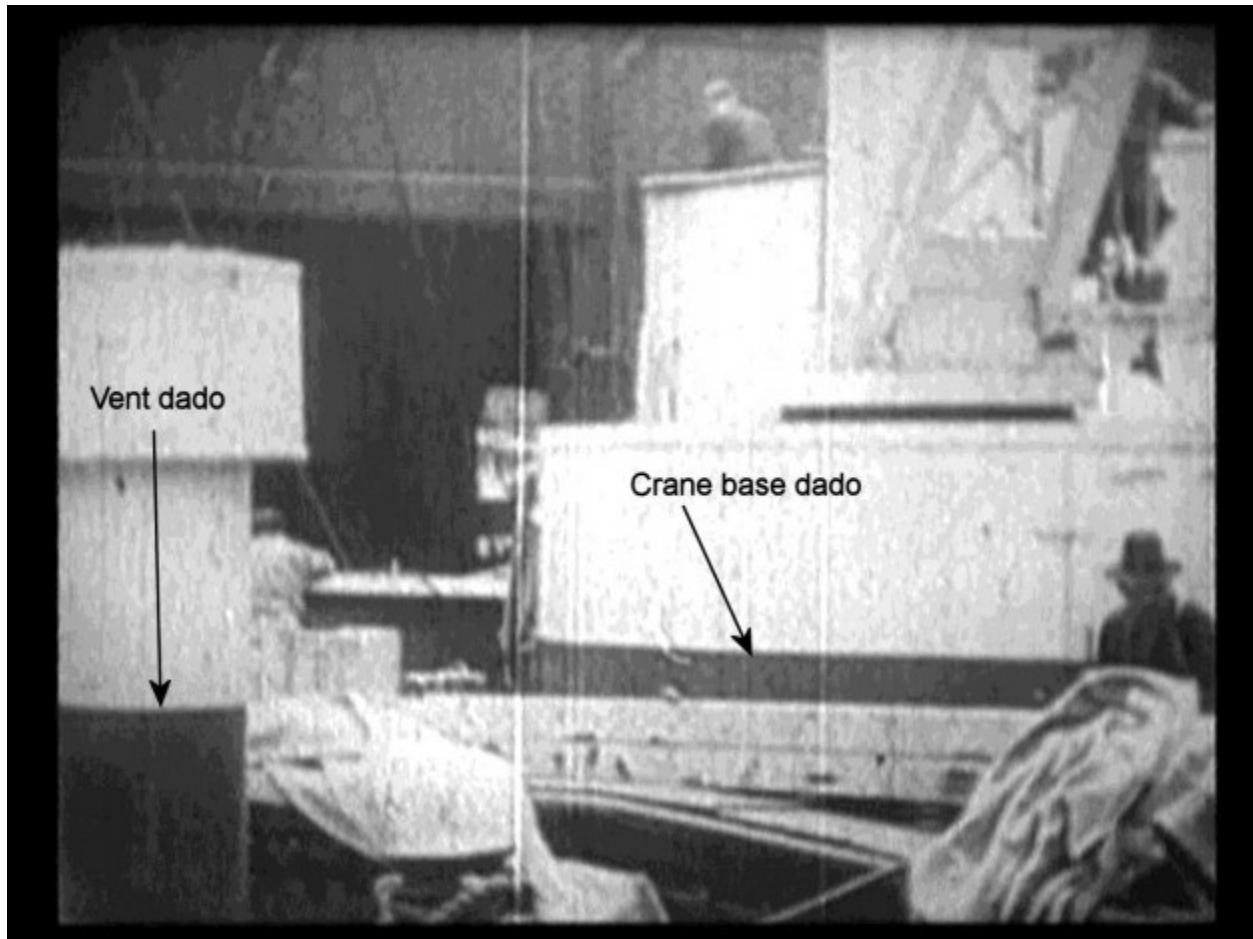


Figure 11

The second area where there appears to be evidence of dark mast paint application but where there is no specific documentation is to the cast brass officers' quarters windows. In 2000, an officers' quarters window was recovered by RMS Titanic Inc. The window before conservation procedures were undertaken is shown in Figure 12.

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Figure 12

In looking at the window before conservation procedures, one would think that he is looking at a brown paint on the window. However, any coloration on the surface at this point can't be taken as evidence of any particular color of paint. Figure 13 shows one of the officers' quarters windows in place on the *Titanic* wreck.



Figure 13

As one can see in this photo, it is impossible colors in this state. Because of the accretions, the once bright white bulkhead walls are a brownish gray color which is far from their original state. Over a period of a year, the conservation procedures were undertaken by Conservation Solutions Inc. When finished this was seen in Figures 14 and 15.



Figure 14



Figure 15

As can be seen in Figure 14, the only paint which is left on the window frame is primarily on the left and top sides of the frame. The rest of the frame is oxidized brass with no residual paint. Some have looked at the frame which has undergone conservation and think that the brown is paint however it is merely bare oxidized brass.

The real controversy which has arisen about this frame has to do with the paint remnants. Some have accepted the evaluation of noted Titanic authorities who contend that the paint remnants are merely primer and the deep brown color coat has been completely lost.

I disagree. I believe that what is seen on the window frame is the dark mast paint we have previously described. The primer which was exclusively specified in the *Britannic* Specification Book for many varied applications is red oxide or as it is also known, red lead. I contend that the color seen on the windows is not a red oxide primer. Figure 16 shows the color of red oxide primer in an actual application rather than a paint chip.

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Figure 16

It can be readily seen that the paint remnants on the window are not the same color as this red oxide. It will be anticipated that someone will object and say that the paint on the window has faded. First of all, how would it fade in a completely dark environment with no ultraviolet light exposure?

Another point is that if this were red oxide primer on the window, why would we not see dark brown paint adhering to it? The purpose of a primer is to increase paint adhesion to the surface to be painted and to provide a flat surface to which the color coats of paint can adhere. It is difficult to believe that every trace of the supposed dark brown paint was selectively removed from the frame with not a bit of it adhering to a primer coat. I would refer anyone who believes this is merely primer to the conservator, Conservation Solutions, Inc. They described the conservation process this way: "After recovery in 2000, the window was desalinated over a period of a year and placed on display. Despite the violent damage that tore away one side of the bronze frame, the 1-inch-thick glass was broken but in place, **original painted finishes were intact** [emphasis added], and both casement and transom hinges functioned." This was the only painted finish on the frame. There is no mention of any other paint being "lost". The Conservation Solutions, Inc. article can be found here: [Titanic Officers' Quarters Window Conservation and Mounting](#). Some may look at Figure 14 and believe that they are looking at dark brown paint on the window frame rather than bare oxidized brass. Figure 17 is taken in different lighting conditions with more of a blue light and you can see the oxidation on the bare metal and nothing which would indicate brown paint.

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Figure 17

I believe that while there is no documentation of dark mast paint being applied to *Titanic's* officers' quarters windows, I believe there is enough evidence in the form of adhering paint from a recovered window to establish the matter. The dados on the well deck cranes and ventilators don't have any documentation either but it is taken as an article of faith that they were painted dark mast. I agree with the contention that the dados of the well deck cranes and ventilators were painted dark mast. It is for that very reason that I don't consider the lack of documentation for the application of dark mast on the officers' quarters window a disqualifying factor.

Another objection to the paint of the officers' quarters windows being dark mast is that critics say that any paint on the window frame has been irreversibly altered after 88 years underwater so that we can't tell what the original color was. No evidence has ever been offered to support this objection. Water damaged paint has been and is restored on a regular basis. Figure 18 shows a before and after photo of a painting which was water damaged. The restoration was done by Lis Art Conservation and Restoration Services. A description of their water damage restoration services is given [here](#).



Figure 18

The most curious aspect of the debate about whether dark mast paint was applied to the officers' quarters windows is the stance of those who are considered experts on colors used on *Titanic*. These experts deny that dark mast was applied to the officers' quarters windows while at the same time not representing the masts in their work as being painted dark mast when there is actual documentary evidence that the masts were painted dark mast. The contradictory stances are stark. Additionally, they produce no evidence supporting their contention that the paint remnants on the recovered window are red oxide primer.

The third category of undocumented areas of application of dark mast is where there is no other supporting evidence as was found on the officers' quarters window paint remnants. The logic behind speculation that these areas may also have had dark mast applied has to do with

the rather limited color palette used in exterior areas of the ship. Below decks there was some use of a color called “chocolate” in work areas. There is not one reference to its use above decks. The first area may be speculative, but by association the painted brass window frames on forward A and B decks may well have been painted dark mast. If a dark brown color was in use for window frames on the boat deck it would seem logical that it would also be used on the brass framed windows on forward A and B decks. But since we have evidence of dark mast being used on the window frames on the boat deck officers’ quarters windows, it is likewise reasonable to speculate that this color was also used on the A and B deck forward brass framed windows. Figure 19 shows a colored drawing of some of *Titanic’s* A deck forward windows if they were painted dark mast. Below this is the same drawing converted to how it would appear if the colors were recorded by blue sensitive black and white film.

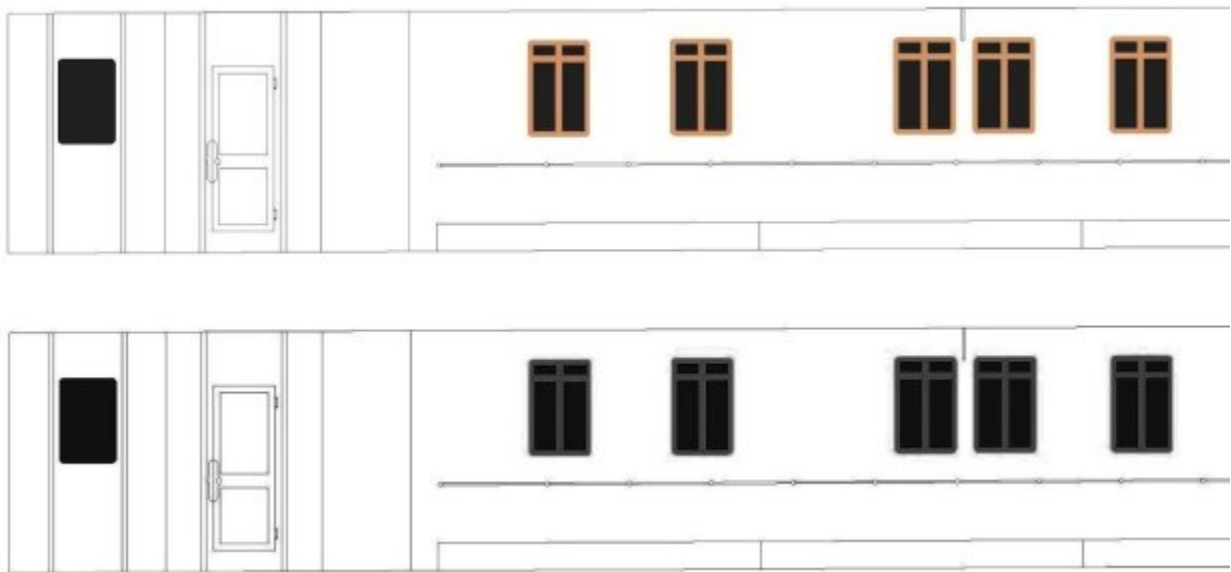


Figure 19

A second area which has the same dark painted appearance in blue sensitive black and white photos is the gunwales of *Titanic’s* lifeboats. There is no documentation or direct evidence here. Figure 20 shows the lifeboat gunwales as recorded by blue sensitive black and white film.

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Figure 20

Figure 21 shows drawings of *Titanic's* lifeboats. This is a comparison of a color drawing which has the gunwales painted dark mast and a conversion of the image to what would be seen in a blue sensitive black and white photo. This shows how dark this color can look in blue sensitive black and white film images.

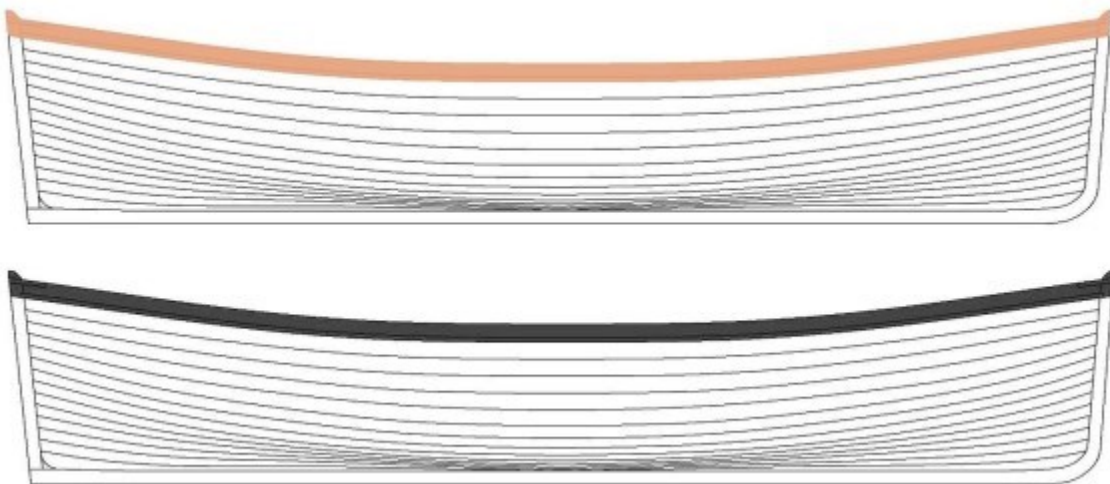


Figure 21



The third area which has the same dark painted appearance in blue sensitive black and white photos is the painted trim in various areas. This trim is primarily seen around the roof of the deckhouses under the first and second funnels. Figure 22 has a color drawing of the officers' quarters deckhouse showing the location of the painted trim and below it is the same drawing converted to the appearance it would have if it were recorded on blue sensitive black and white film. Again, paint application here is speculative but it appears at least reasonable given what we know of the application of dark mast to other areas.

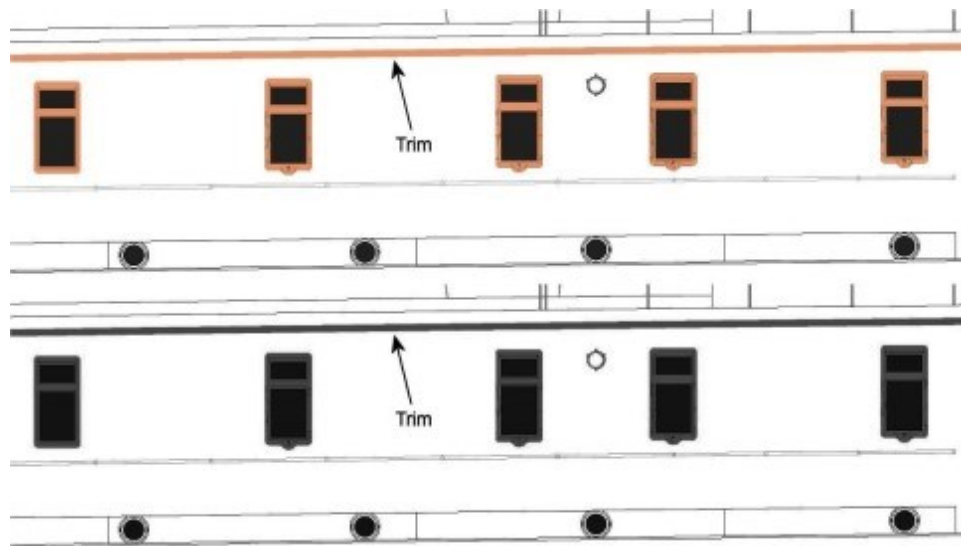


Figure 22

## Conclusion

This article has examined the color dark mast and where it was and may have been applied to the visible external areas of *Titanic*. The areas where there is full documentation for the application of dark mast are the masts, derrick and well deck dados. I believe there is sufficient evidence to conclude that *Titanic's* officers' quarters windows were painted dark mast as well as the well deck crane base and ventilator dados but there is no direct documentation. The evidence consists of paint remnants on a recovered officers' quarters window frame. By extension, it is speculated that forward brass frames windows on A and B decks were painted dark mast but again, there is no documentary evidence. Other speculative areas which do not have any relation to the window frames but which may have been painted dark mast are the lifeboat gunwales and areas where the deckhouse trim pieces were painted.