



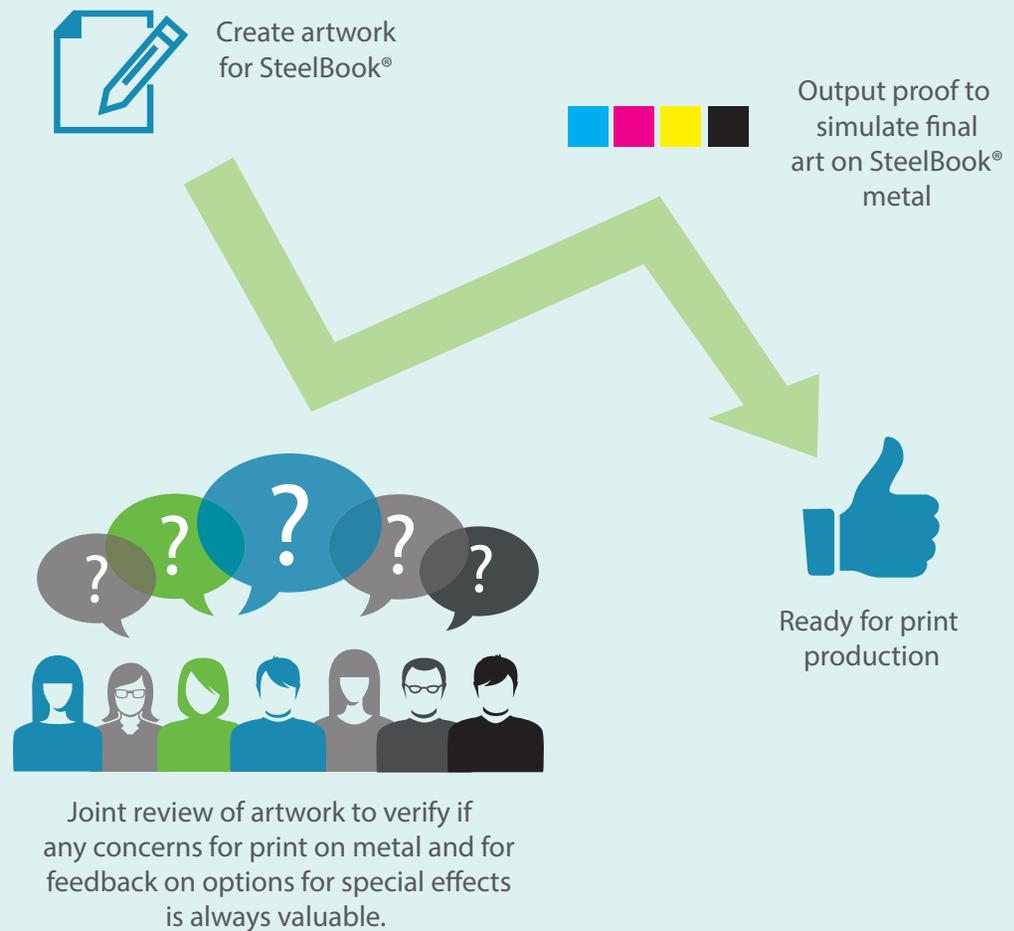
# Product Specifications

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## It's important to us to help ensure the best possible result for your SteelBook® projects.

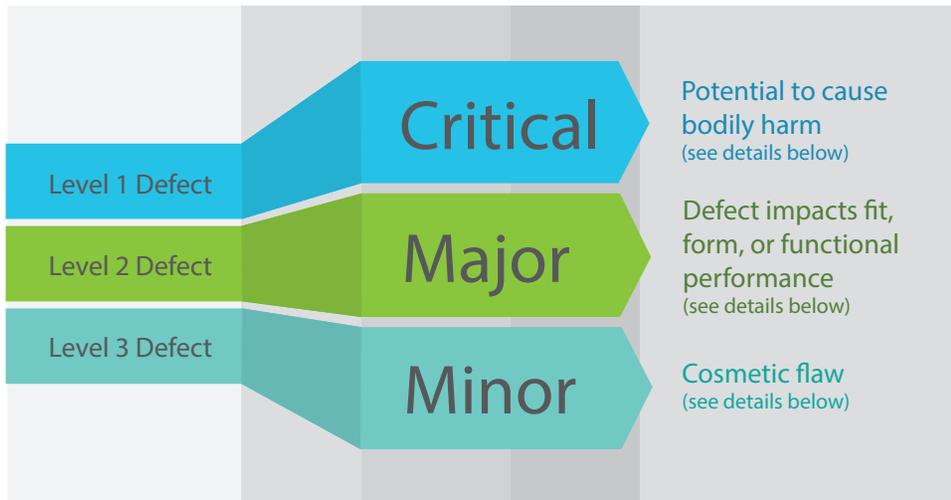
Your Creative team will find a lot of helpful information in the SteelBook® Artwork Specifications, included in the zip folder with art templates.

Metal is a fantastic media to play with; combining metal effects, colors and varnishes can create a unique keepsake. Since there are major differences between printing on metal vs paper, it's important to be aware of the basis criteria when creating artwork for print on metal.



We hope that there will never be a quality issue related to one of your projects, but in the event this does happen we have a program in place for classification of defects to help assess the issue and determine next steps.

## Classification of SteelBook® Defects



### Level 1 - Critical Defect

**The primary criteria for assessment of an issue as a critical defect is the potential for bodily harm.**

Metal Shells + Spine strip:

1. Sharp edges, deformations or cracks on metal parts that can create a potential risk for bodily harm.
2. Partial loose or misplaced spine strip.

Plastic Insert:

1. Broken plastic insert that can create a potential risk for bodily harm.

### Level 2 - Major Defect

Metal Shells + Spine strip:

1. Scratches that disfigure the artwork, special attention to areas with critical artwork such as customer logo or major artwork details important for the overall impression of the artwork.
2. Scratches that penetrate ink, unpainted ('bare') metal is visible.
3. Dents in metal shells, special attention to areas with critical artwork, like customer logo or major artwork details important for the overall impression of the artwork.
4. Embossing (where applicable) details that damage the artwork and corrosion protective top lacquer.
5. Printing – See notes specific to PRINT DEFECTS (pg 5).

Plastic Insert:

1. See specific classification for COMPONENT DEFECTS (pg 7).

Assembled SteelBook®:

1. Mis-application of front and back covers in relation to spine and grip.
2. Contaminations that clearly disfigure the artwork; special attention to areas with critical artwork such as customer logo or major artwork details important for the overall impression of the artwork.
3. Contaminations with a total area larger than 10 mm<sup>2</sup>.
4. Misalignment of spine strip – no risk for bodily harm.
5. Visible glue on spine strip.
6. Misalignment of plastic insert (upside down / 180° compared to art).

### Level 3 - Minor Defect

Assembled SteelBook®:

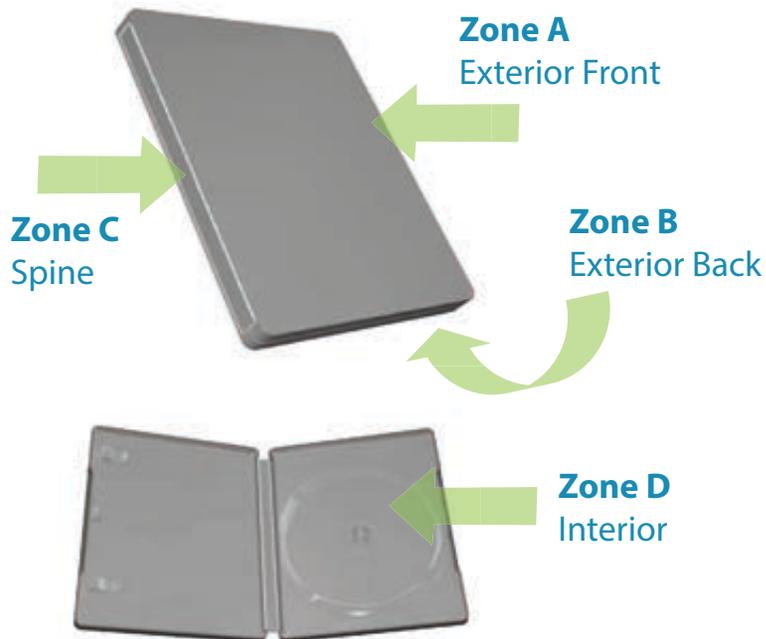
1. Surface scratches that do not penetrate ink or coating.
2. Scratches max 3.0mm that disfigure customer logo or product title,
3. Maximum scratch of 4.5mm in length.
4. Weak embossing or misalignment of emboss by more than 1.5 mm compared to artwork details.
5. Printing – See notes specific to PRINT DEFECTS (pg 5).
6. Plastic insert – Small scratches, small dents or burrs from mould ejection pins.
7. Contaminations visible at "arms length" check – larger than 5mm<sup>2</sup>.

# Quality Check

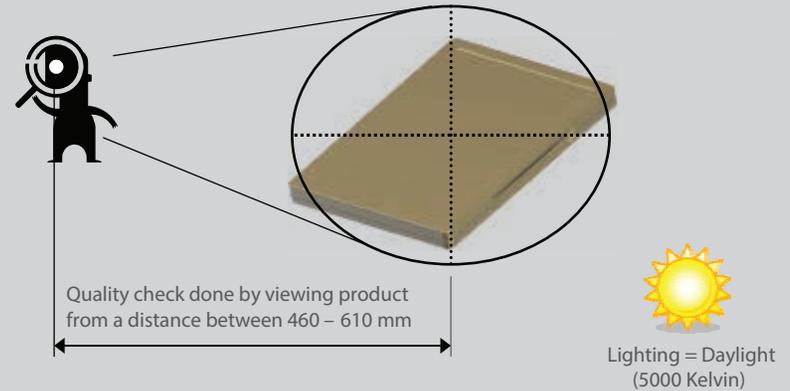
## Surface Zones

To make it easier to discuss classification of defect levels or appearance and placement, the SteelBook® case is referred to by these 4 identified surface zones.

- Zone A:** Front cover / panel areas visible when container is closed
- Zone B:** Back cover / panel areas visible when container is closed
- Zone C:** Spine edges / panel areas visible when container is closed
- Zone D:** Interior surfaces of the container not visible when container is closed



## Viewing Guidelines



Products inspected for compliance with these quality standards should be examined under the following conditions:

When viewing the “overall impression” of SteelBook®, it's important to note that the product is a industrial manufactured product, not a handcrafted product and therefore minor variations in overall appearance of the product will occur.

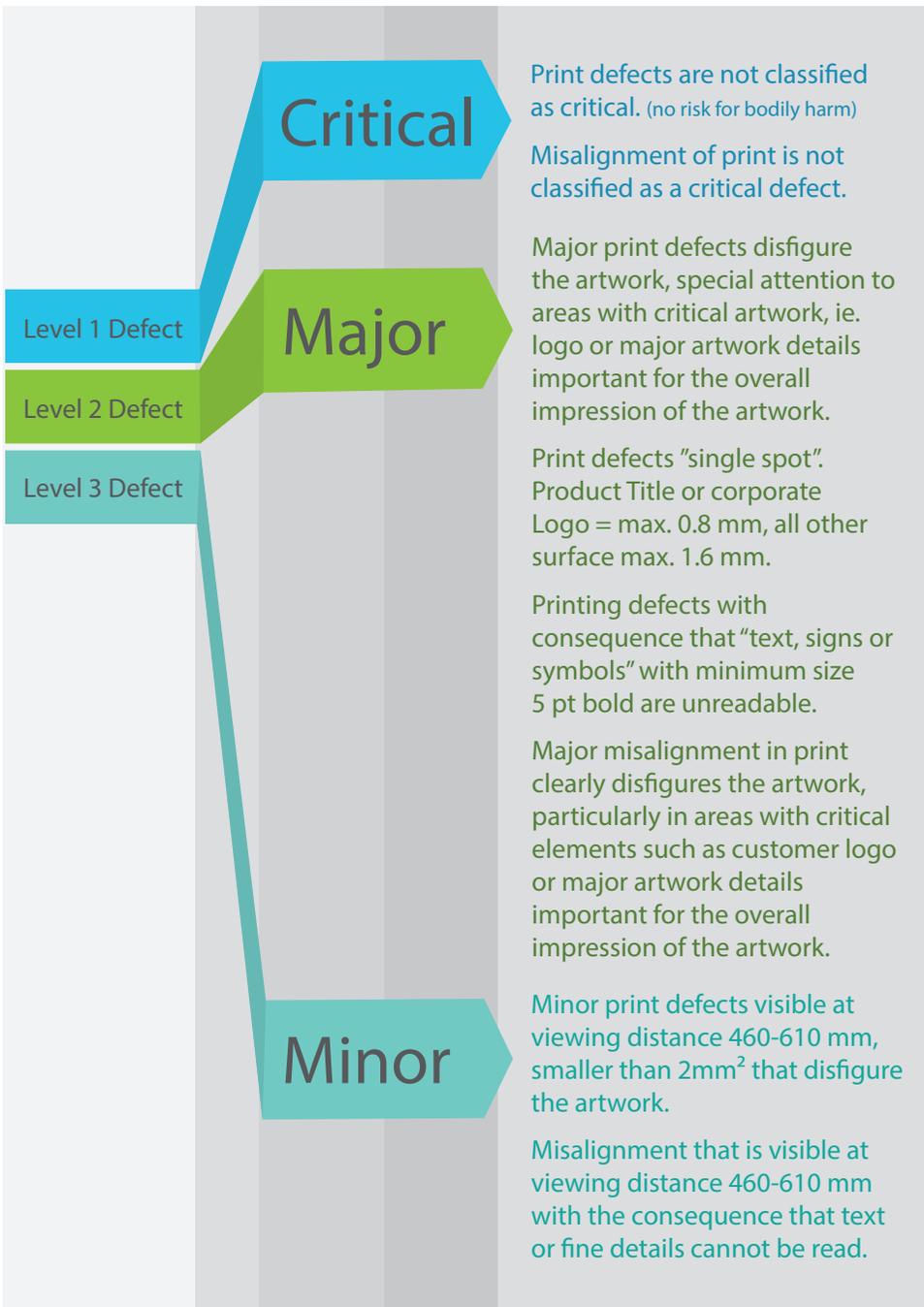
Products should be examined at a viewing distance of 18” to 24” (460 to 610 mm), starting with surfaces perpendicular to viewer's line-of-sight followed by a 15° tilt in horizontal and vertical direction so reflection of light passes over the surface.

Lighting should be daylight type (5000 Kelvin).

Examination area should be dust-free and dry.

Calibrated measuring devices to be used to evaluate size of defects.

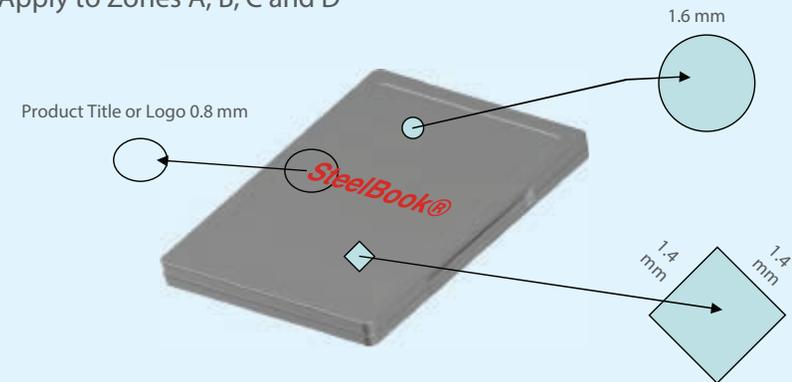
# Classification of Print Defects



## Printing: Cosmetic Issues

A cosmetic imperfection in the print can manifest as a 'hickey' or blank spot in the printed artwork that is not covered with ink, or as a heavy solid dot or 'blemish' spot visible in the print.

Apply to Zones A, B, C and D



Classification of allowable issues per zone and overall

Zone	Product title or logo (max. 0.8 mm)	Single spot (max. 1.6 mm)	Multiple spots (0.8+1.6 size)
A+B	> 1 spot	> 2 spots	> 3 spots
C	> 1 spot	> 2 spots	> 3 spots
D	> 2 spots	> 3 spots	> 3 spots
<b>Total all zones</b>	<b>&gt; 2 spots</b>	<b>&gt; 3 spots</b>	<b>&gt; 4 spots</b>

## Printing: Color Variation

### Why can there be color variation in artwork between the approved proof and the finished SteelBook® case?

There are several factors that can impact the final result of the printed artwork on a SteelBook® case. 100% match between digital SteelBook® proof and final printed artwork is not possible.

#### 1. Differences in process between proof and final print.

The SteelBook® proofing equipment we use is a digital system, however printing and lacquering of the case is done using ink and offset print equipment and varnish; the 'process spread' of the press also influences the final result.

#### 2. White underlayer (full or partial).

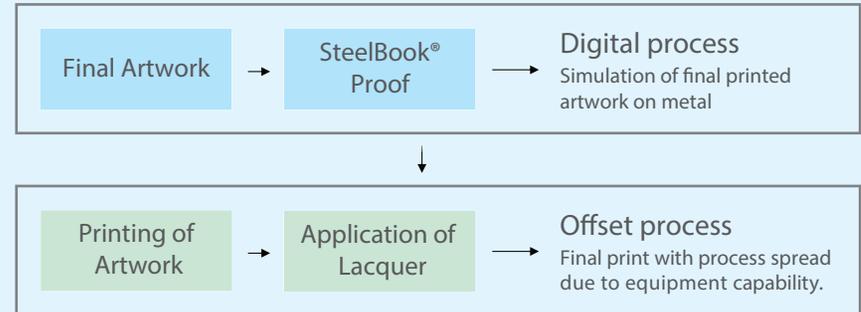
White ink printed on metal is not "bright" white, therefore artwork printed on metal will never be as bright as it is when printed on white paper. White ink printed on metal will have either a slight yellow or a cooler grey-blue tone, depending on the equipment used, influencing the overall color of the printed artwork, .

#### 3. Color complexity.

There is a risk of color variation on artwork with large areas of solid color created from CMYK; we recommend converting to spot color for this. For artwork created primarily in neutral colors made in CMYK, the color gamut is so narrow any shift in ink balance on press can result in color variation; it is worthwhile to consider converting to duotone if this is appropriate. For more detail see document "STEELBOOK® ARTWORK SPECS.pdf".

#### 4. Type of top laquer (varnish) can have an impact.

See document "STEELBOOK® ARTWORK SPECS.pdf".



## Printing: Registration Misalignment

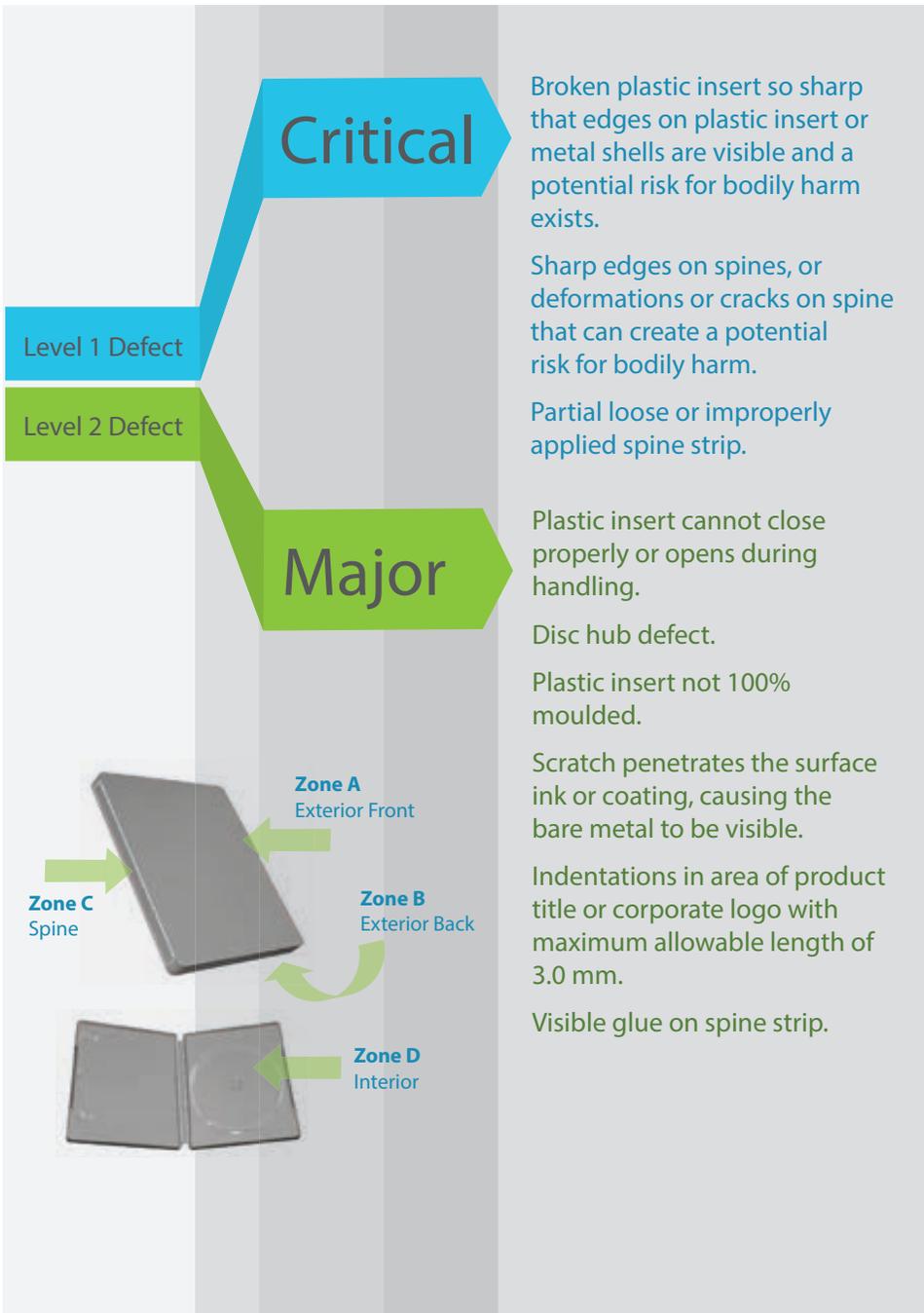
This issue in printing is defined as an issue that makes the artwork 'unclear' due to the colors not having 100% registration alignment or the presence of a gap between the artwork elements.

Please refer to page 05 for details on Classification of Print Defects.

Apply to Zones A, B, C and D



# Classification of Component Defects



Surface scratch that does not penetrate the ink or coating.

Indentation on Surface Zones A, B or C with maximum allowable length of 4.5 mm.

Small dents/burrs from mould ejection pins and small scratches not exceeding 6.0 mm in length.

Surface scratch on spine to a maximum length of 4.5 mm. Maximum allowable length for surface scratch on spine that interferes with the product title or corporate logo is 3.0 mm.

## Minor

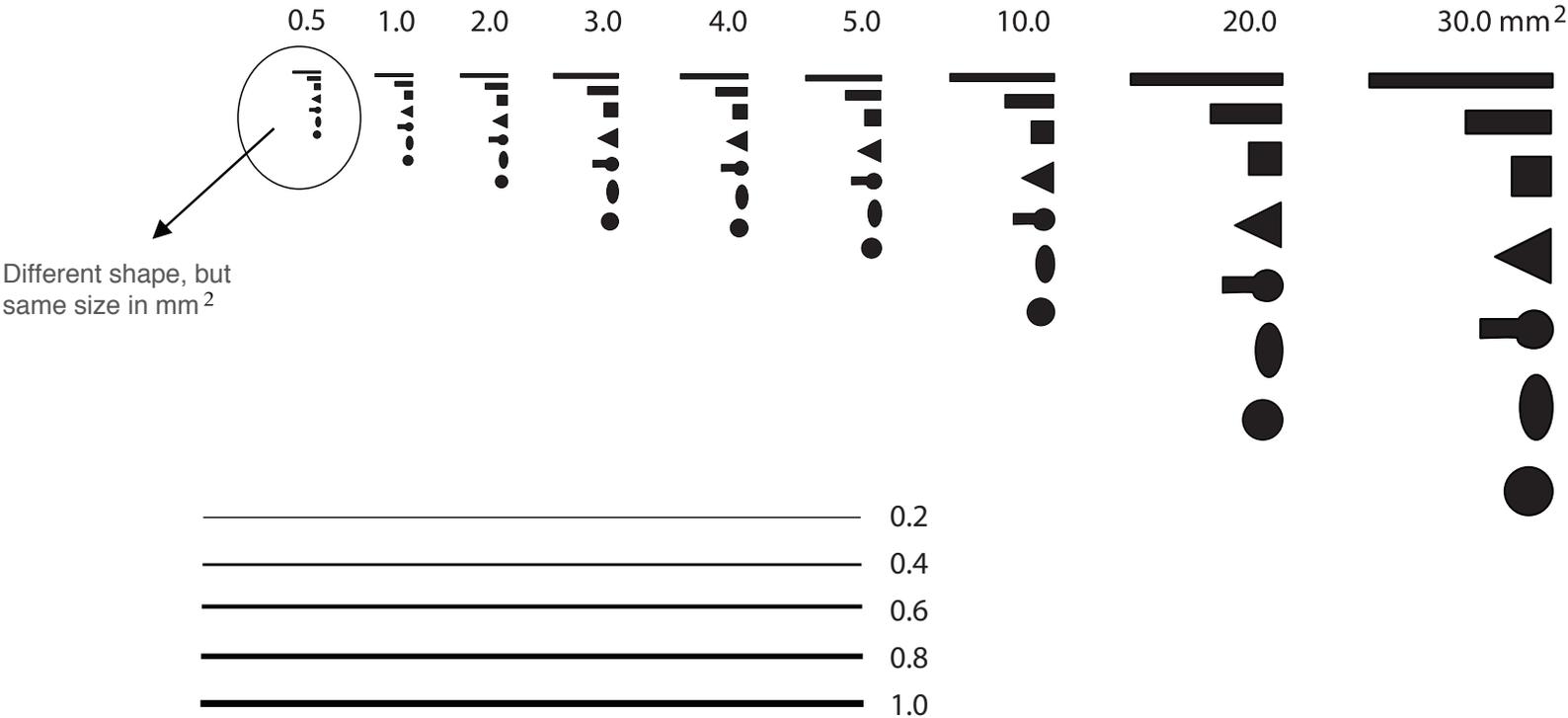
Level 3 Defect

Classification of allowable issue per zone and overall.

Description/Zone		
Title or Logo (max 3 mm)	> 1	> 1
Zone A+B+C (max 4.5 mm)	> 3	> 1
Zone D (max 6.0 mm)	> 3	
<b>Total allowable number of scratches/dents all zones</b>	<b>&gt; 3</b>	<b>&gt; 2</b>

# Examples of Defect size

This diagram is not exactly to scale. We will be happy to supply a clear sample sheet of this diagram for reference on request.



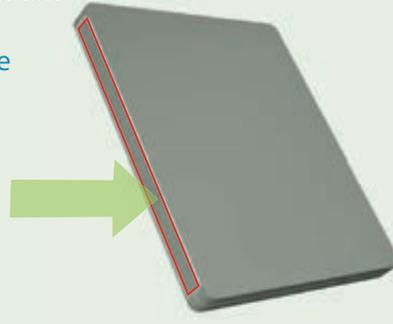
# Classification of Component Defects

## Visual Inspection of Spine Placement

Due to the assembly process the placement of the metal spine may in some cases be angled to a very minor degree in relation to the plastic insert.

As long as there is a visible plastic edge around the metal spine the SteelBook® product is within specification.

Tolerance in sideways and lengthwise placement is +/- 0.5 mm as long as a plastic edge is visible around the metal spine.



## Non-defects in Plastic Part

Non-defects are defined as visual aspects unavoidable due mould process and assembly process.

Acceptable variations may include flow lines from mould process, suction cup markings from mould process and shadows resulting from the resin.

Very narrow lines may be visible on either front or back of plastic insert (up to 30 mm away from spine hinge). Very small directional scratches may also occur due to the SteelBook® assembly process.

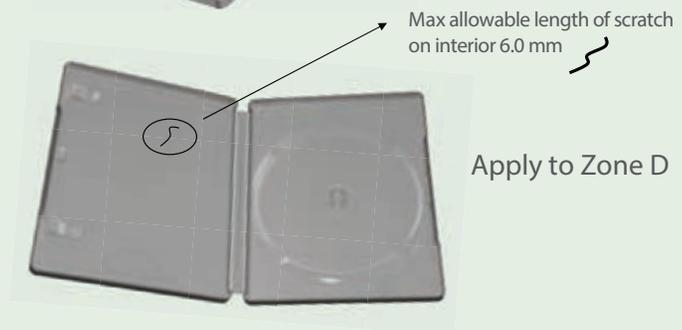
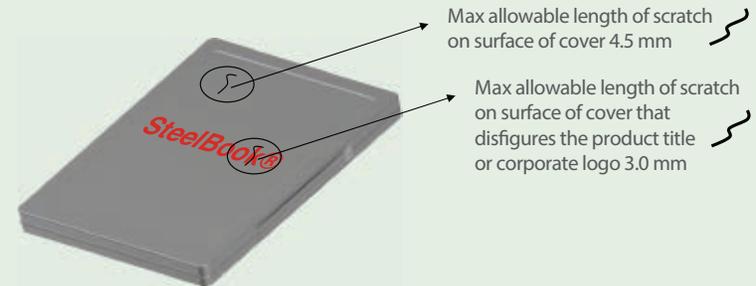
Every effort is made to keep occurrences of visible variations as low as possible.

## Scratches & Indentations

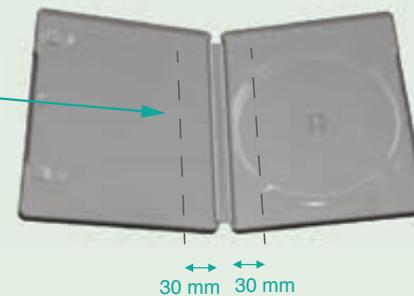
A scratch is defined as a narrow line that penetrates the surface ink or coating causing bare metal to be visible.

An indentation is defined as a small dent on the metal surface.

Apply to Zones A, B and C



Apply to Zone D



# Quality Concerns

As SteelBook® is a Premium Quality Packaging product, the total number of visible cosmetic issues is recognized to be an important part of the overall Consumer Experience.

Although there may be cosmetic issues within the acceptance criteria defined by the individual descriptions of cosmetic issues, the total number of cosmetic issues when combined on same SteelBook® product are not to exceed 5, as stated below in Total Issues Combined.

If this total number is exceeded, the individual SteelBook® may be counted as a defective product under the sampling plan for incoming inspection.

If a Claim is issued, the claim must be send to Scanavo and the handling of the claim will be agreed between the parties.

Please be aware that in the event of a Claim it will be necessary to return defective goods.

Printing Defects

Cosmetic Artwork Issues

Apply to Zones A, B, C, D

Zone	Product title or logo (max. 0.8 mm)	Single spot (max. 1.6 mm)	Multiple spots (0.8+1.6 size)
A+B	> 1 spot	> 2 spots	> 3 spots
C	> 1 spot	> 2 spots	> 3 spots
D	> 2 spot	> 3 spots	> 3 spots
<b>Total all zones</b>	<b>&gt; 2 spots</b>	<b>&gt; 3 spots</b>	<b>&gt; 4 spots</b>

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Metal Surface Defects

Other Cosmetic Issues

ie. Scratches or Indentations

Apply to Zones A, B, C

Description/Zone		
Title or Logo (max 3 mm)	> 1	> 1
A+B+C (max 4.5 mm)	> 3	> 1
D (max 6.0 mm)	> 3	
<b>Total no. all zones</b>	<b>&gt; 3</b>	<b>&gt; 2</b>

+

=

Total Issues Combined

(Print + Other Cosmetic Issues)

Maximum allowable total number of cosmetic issues on whole box.

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<b>Total sum of issues on SteelBook® may not exceed</b>	<b>&gt; 5</b>
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