

DECORATOR'S GUIDE (Aerial Elements and Rigging Points)



INSPECTION OF AERIAL ELEMENTS AND INSTALLATION OF RIGGING POINTS



SERVICE OF INSPECTION OF AERIAL ELEMENTS AND INSTALLATION OF RIGGING POINTS

1. Presentation of the Service.	3
2. Feria de Zaragoza's General Conditions.	4
3. Action protocol.	6
4. Descriptive Project.	13
5. Conditions for the Project Acceptance. Inspections. Applicable regulations.	15



1. PRESENTATION OF THE SERVICE.

In 2011, Feria De Zaragoza has started, along with the collaboration of the company RZ, *Cálculo y Sistemas de Rigging* (Calculation and Rigging Systems; from now on, RZ Rigging) the new Service of Aerial Elements Inspection and Installation of Rigging Points, with the following goals:

- Guarantee physical safety of people working or visiting the premises.
- Guarantee safety and adequate maintenance of the installations.

The implementation of this Service means a number of changes in the contracting system and installation of rigging points, as well as putting into effect the mandatory regulations that will be applicable to:

Every exhibitor company wishing to install aerial elements hanging from the ceiling of the pavilions of Feria de Zaragoza, in their contracted space.

The aim of this document is to inform about the new procedures and regulations to be followed.

Should any further information or technical advice be needed, our staff is at your disposal via telephone or e-mail:

rigging@feriazaragoza.es
+34 876 53 10 17
+34 902 44 44 42

Detailed information for this department and its rates is also found at:

www.feriazaragoza.es
Exhibitor's folder.



2. FERIA DE ZARAGOZA'S GENERAL CONDITIONS.

- Every exhibiting company will be able to use aerial elements hanging from the ceiling of Feria de Zaragoza's halls or pavilions, in their contracted space, complying with the general conditions of Feria de Zaragoza, as well as the regulations and guidelines stated in this document.
- The structures to be suspended will always be designed so that they do not threaten the safety of people or installations. The characteristics of these structures will be described in the Descriptive Project, as per the details in section 4.
- The Service application (n. 17), along with the Descriptive Project and documents requested in section 4, must be sent at least one month before the inauguration of the trade fair, to the address:

rigging@feriazaragoza.es.

- Every rigging point to be installed on to the ceiling of the pavilions must be put into place exclusively by RZ Rigging staff, according to the exhibitors' requests, in the time and form stipulated by the action protocol (section 3).
- RZ Rigging will confirm the number of rigging points needed, depending on the characteristics and type of structure to be hung as well as the loads of each pavilion or hall. As a general rule, to make these calculations they will take into account that the MAXIMUM WEIGHT per rigging point is 50 kilograms, with a minimum distance between points of 2 metres.
- The installation of the rigging points will not be put into place without prior acceptance by Feria de Zaragoza through RZ Rigging of the Descriptive Project within the period specified and in the form stipulated in section 3.
- The process of rising and lowering of the structures will be done under the supervision of RZ Rigging technical staff.
- The suspension of a structure will only be done after an inspection on site by RZ Rigging of the state and type of materials and of the assembly system of the structure that must match the Descriptive Project previously accepted. If substantial, non-rectifiable differences are observed, suspension will not be done.



- The service rates include the revision and previous study of the Descriptive Project, the calculation and planning of the rigging point system to be installed, on site inspections, rigging point installation and removal, rigging material and suspension machinery.

You will find the rates on the back of the Service Application.

- In order to confirm the service, the exhibitor must send a copy of the BANK TRANSFER document proving the payment of the rates to rigging@feriazaragoza.es. (Please remember to add V.A.T.)



3. ACTION PROTOCOL.

A. PRELIMINARY CONSIDERATIONS.

Feria de Zaragoza's new service includes a two-stage control system. This system tries to optimize the conditions of the installation of aerial structures with the aim of guaranteeing the safety of goods and people entering the premises.

1. Before assembling:

- Supervision of the Project of the structure or elements to be hanged (structures, woodwork, lighting, ironwork, advertising, etc.).

2. During the assembly:

- Installation of rigging points done exclusively by specialized technical staff authorized by Feria de Zaragoza.
- Technical supervision on site of the aerial elements to be hanged, according to the approved Project.
- Rigging assessment. Suspension and securing of the structure.

On the following point of this section, the Action Protocol with the Exhibitor or Decorator, established by Feria de Zaragoza, will be detailed.

Should you need any further information, do not hesitate to contact with our staff via:

rigging@feriazaragoza.es
+34 876 53 10 17
+34 902 44 44 42
www.rzrigging.es



B. ACT PROTOCOL.

BEFORE THE EVENT:

▪ APPLICATION PROCESSING. PROJECTS ACCEPTANCE:

1. SENDING OF APPLICATION FORM (n.17) AND DESCRIPTIVE PROJECT (see section 4).

- 1 month before the beginning of the event
- Through email to rigging@feriazaragoza.es

2. PROJECT REPORT. APPROVAL OF APPLICATION.

- Project checking and RZ Rigging's Report.
- Issuing of the first report: 7 days after receiving the documentation.

Possibilities:

2.1. Accepted Project:

a) Confirmation of the requested number of rigging points and the execution of Service:

The exhibitor will be sent:

1. Application stamped by RZ Rigging, and amount to be paid.
2. Accepted Project.

b) When confirming the service, Feria de Zaragoza will proceed to issue an invoice corresponding to this service.

*Important:

The exhibitor's person in charge of the assembly must be carrying both documents during the installation of the structure, as the inspection staff or the staff of the Technical Department may ask him/her to produce them at any time.



2.2. Projects with faults that can be corrected:

a) Exhibitor will be informed of the details to be corrected and the dates and ways to do this.

b) The exhibitor must send the corrected Project in time via e-mail to Feria de Zaragoza.

c) A second review of the Project will be done. If the correction is acceptable, the confirmation of the requested number of rigging points and service execution will be done:

The exhibitor will be sent:

1. Application stamped by RZ Rigging, and amount to be paid.
2. Accepted Project.

d) When confirming the service, Feria de Zaragoza will proceed to issue an invoice corresponding to this service.

2.3. Non-accepted Project:

- If the Descriptive Project sent by the exhibitor presents faults that can not be corrected, RZ Rigging will contact the exhibitor to request a new Application and Project; provided that it is done within the stipulated period.

*Important:

- Deadline to send the Application form and Project: 30 days in advance.
- Deadline to confirm the services: 15 days before the beginning of the fair.
- Applications sent or confirmed after the deadline will not be guaranteed service.
- There may be additional charges if there is a cancellation or substantial change of the Project within 7 days prior to the beginning of the event (This additional charge will be studied in each case separately).



- We recommend sending the documentation at your earliest possible convenience to guarantee that your application can be processed in the periods stipulated for this procedure, without any further charge.
- Early application will guarantee that your structure will not be rejected or altered, in the event that the number of applications or the characteristics of other exhibitor's projects force Feria de Zaragoza to close in advance the admission of new applications for a certain pavilion or hall, with the aim not to exceed the acceptable load limits.
- We would like to remind you that the person in charge of the assembly must carry the confirmed Application for the accepted Project during the assembly.

FAIR / ASSEMBLY:

1. RIGGING POINTS INSTALATION.

- On the date agreed by the exhibitor (previous to the exhibitor's arrival to the premises), the staff authorized by Feria de Zaragoza will proceed with the installation of the requested rigging points in accordance with the characteristics of the accepted Project.

2. EXHIBITOR'S ASSEMBLY / INSPECTIONS.

- At the exhibitor's arrival, and while assembling the structure on the ground, RZ Rigging will contact the person in charge designated by the exhibitor and will proceed to the on site inspection.

At this inspection, RZ Rigging technicians will check:

1. Mandatory documentation (Application form and accepted Project).
2. Type, characteristics, weights and state of the material and elements used that will have to match with the information of the accepted Project.



**Important:*

If faults with no possibility of correction or substantial breach of regulations are observed, RZ Rigging will inform Feria de Zaragoza's technical department, who will take the appropriate measures.

Due to this, we beg all exhibitors to strictly follow the information from the Project.

In the event that the exhibitor needs to make changes to the Project during the assembly, RZ Rigging staff must be notified as soon as possible.

3. EXHIBITOR'S ASSEMBLY / RIGGING ASSESMENT

- At the completion of the assembly of the structure on the ground, the exhibitor will contact RZ Rigging who will make a complete last inspection (including the assembly system), previous to the issue of the Assessment.

Possibilities:

3.1. Accepted rigging.

a) Duplicated copies of the passed Rigging Assessment. Signature of the exhibitor's selected responsible person.

b) Raising of structure.

c) Definitive high binding (Safety wiring and collection of chains installation). Made by RZ Rigging technicians.

**Important:*

The process of raising and lowering the structures will be made under RZ Rigging technical staff's supervision.

3.2. On site Faults that can be corrected.

a) If faults that can be corrected in the structure assembly are observed, RZ Rigging will notify the exhibitor of the changes to be made.

b) Once the changes have been made, the exhibitor will get in contact again with RZ Rigging, and RZ Rigging staff will monitor the fixing.

c) Issuing of positive Rigging Assessment. Signature of the person responsible from the exhibitor.

d) Raising of the structure.

e) Definitive high binding (Safety wiring and collection of chains installation). Made by RZ Rigging technicians.

3.3. Non-accepted rising.

a) If faults that can not be corrected are observed or a substantial breach in the regulations is found, RZ Rigging will inform Feria de Zaragoza's Technical Department who will take the appropriate measures.

*Special cases:

- Raising in stages (for hanging lights, advertising banners and other elements):

It requires previous communication to RZ Rigging.
The Rigging Assessment will not be issued until the final raising.

- Lowering of the structure once the Assessment is issued and securing the structure:

Once raised and secured the structure will have to stay in place until the dismantling of the fair.

In the case of the exhibitor needing it to be lowered, appropriate notification and justification must be provided.

The lowering, the second rising and subsequent securing may lead to an additional charge for the exhibitor and it will be recorded in the assessment. (Any additional charge will be looked into depending on each situation).



FAIR / DISMANTLING:

1. LOWERING OF THE CHAINS.

- Once ended the fair, and according to the date and timetable agreed with the exhibitor, RZ Rigging technicians will proceed with the dismantling of the safety wiring and lowering of the chains.

2. LOWERING OF THE STRUCTURE.

- Lowering of the structure will be done under the supervision of RZ Rigging technical staff.

3. DISMANTLING.

- Once down, the exhibitor will proceed to the dismantling of the elements of the structure, according to dates and timetables established by Feria de Zaragoza.

4. UNINSTALLATION OF RIGGING POINTS.

Once finished the dismantling of the structure and once the exhibitor has taken away all the material, RZ Rigging technical staff will proceed to the dismantling of the rigging system.



C. SUMMARY TABLE.

BEFORE THE FAIR
<p>Sending Application n. 17 + Descriptive Project <small>Application deadline: 1 month before the inauguration date of fair</small></p>
<p>Service confirmation: Application and Project acceptance by RZ Rigging <small>Service confirmation deadline: 15 days before inauguration date of fair</small></p>
ASSEMBLY
<p>Rigging points installation <small>Before the exhibitor's arrival</small></p>
<p>Material inspection <small>(Remember to bring service confirmation documents - Application and Project)</small></p>
<p>Assembly inspection. Rigging Assessment.</p>
<p>Hanging of the structure</p>
<p>Safety wiring. Chains collection</p>
DISMANTLING
<p>Lowering of chains</p>
<p>Lowering of the structure</p>
<p>Dismantling of the structure</p>
<p>Dismantling of rigging points</p>

4. STRUCTURE TO BE SUSPENDED PROJECT (DESCRIPTIVE PROJECT).

Plan of the exhibitor for the installation of an aerial structure in his stand, suspended from the ceiling of one of the pavilions of FERIA de Zaragoza.

The mandatory filing of the Descriptive Project must be submitted with the corresponding Service Application (n. 17).

The Project to be submitted is the sum of these two documents:

Descriptive memory of the structure to be suspended + Technical design for the installation of rigging points

A. DESCRIPTIVE MEMORY:

Explanatory document of the installation to take place and basic characteristics of the structure to be suspended.

It must contain:

General stand data:

- Fair. Exhibitor. Hall or pavilion. Stand number.
- Structure installer.
- Exhibitor's person in charge of the structure assembly. Contact details.

Description and documents associated to the structure to be suspended:

- Description of the structure that will be suspended from the rigging points to be installed from the ceilings of the pavilion.
- Dimensions and total weight of the structure.
- Load distribution.
- Values of the weight of all the elements that will be supported by the rigging points.
- List of materials used (A quality certificate for all the materials with a structural mission must be included).
- Description of the system of union of the structure to the rigging point (slings, shackles, etc.).



- Sketch to scale, detailing the floor plan and height of the installation to be made, with measurements, orientation in reference to the pavilion, coordinates, load and height distribution.

B. RIGGING POINTS INSTALLATION PLAN:

Graphic representation of the exact situation and characteristics of the rigging points to be installed.

It must have:

- Number and location of requested rigging points.
- Value of the load transmitted to each rigging point.
- Coordinates in relation to the stand perimeter.
- Orientation of the stand in relation to the pavilion.
- Height of the structure to the floor.

Should you need help to prepare your Descriptive Project, do not hesitate to get in contact with our department.



5. CONDITIONS FOR THE PROJECT ACCEPTANCE. INSPECTIONS. APPLICABLE REGULATIONS.

A. ACCEPTANCE OF PROJECTS.

- The Project will be checked in order to guarantee that it complies with the required minimum content.
- The Project will be checked in order to ensure that a complete description of every structural element is attached.
- The suitability of the different structural elements, according to their maximum admissible load will also be checked.
- It will be verified that the Project has a sufficient definition level to make its execution viable.

MATERIALS:

Materials used by the exhibitor for the structure to be suspended must be duly marked (including CE mark) and documented with their corresponding manufacturer's quality certificate.

The exhibitor (or structure installer), must have the material maintenance up to date as indicated by the manufacturer and/or regulations.

REGULATIONS:

The following regulations are mandatory:

- Steel slings: UNE-EN 13414
- Wire rope slings: NTP 221
- Textile slings: UNE-EN 1492
- Components for slings: EN 1677
- Steel wire ropes: EN 12385
- Steel wire ropes: NTP 155
- Terminations for steel wire ropes: UNE-EN 13411
- Dee Shackles and Bow shackles grade 6: UNE-EN 13889
- Forged shackles for general lifting purposes: UNE 58-535-90
- Truss: The manufacturer's instructions for its correct use, inspection and maintenance should be followed.
- CTE: Código Técnico de la Edificación. (*Technical Building Code*).



B. RIGGING POINTS CALCULATION.

- Structure elements weight indicated in the Project will be checked to be coherent.
- It will be checked that the request of rigging points is correct, according to the weight and geometry of the structure to be suspended.
- As a general rule for rigging point calculations, it should be taken into consideration that the **MAXIMUM WEIGHT** per rigging point is 50 kg., with a minimum distance between points of 2 m.; although depending on the characteristics of the structure and specific conditions of the fair pavilion's ceiling, different calculations might be needed.
- If the Project contains calculations to establish the number of rigging points, they will be revised in order to approve them.

C. INSPECTIONS ON SITE. ISSUING OF RIGGING ASSESSMENT.

At the arrival of the exhibitor to the premises, or while starting the assembly of its structure on the ground, RZ Rigging technicians will check the material, checking that it is in accordance to the information on the accepted Project. They will also check that every structural element is duly marked or labelled as per the regulations applicable.

Afterwards, once the structure is assembled, there will be a last inspection, prior to the raising. If no faults are observed, the rigging assessment will be approved by the engineering department of RZ Rigging and the raising will proceed. A copy of the assessment will be given to the exhibitor's person in charge.

The process of raising and lowering of the structures will be done under the supervision of RZ Rigging technical staff.