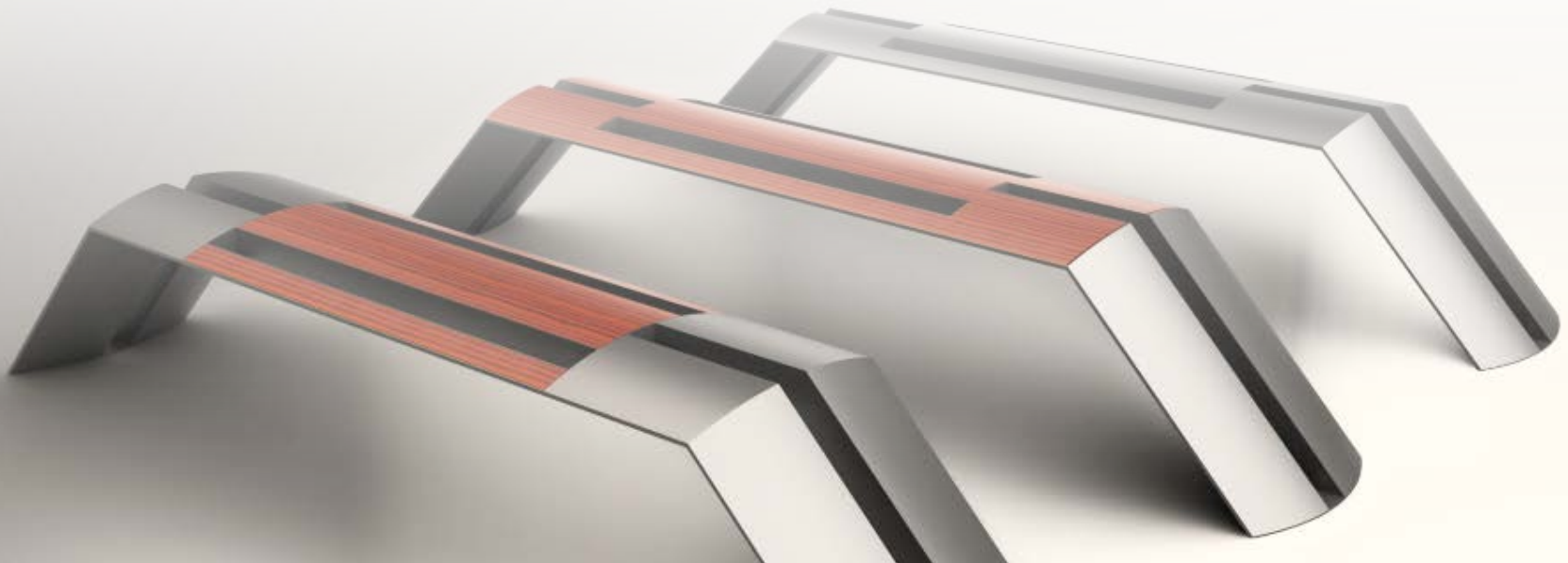


Design of nontraditional street furniture sitting element

Vladimír Haltof



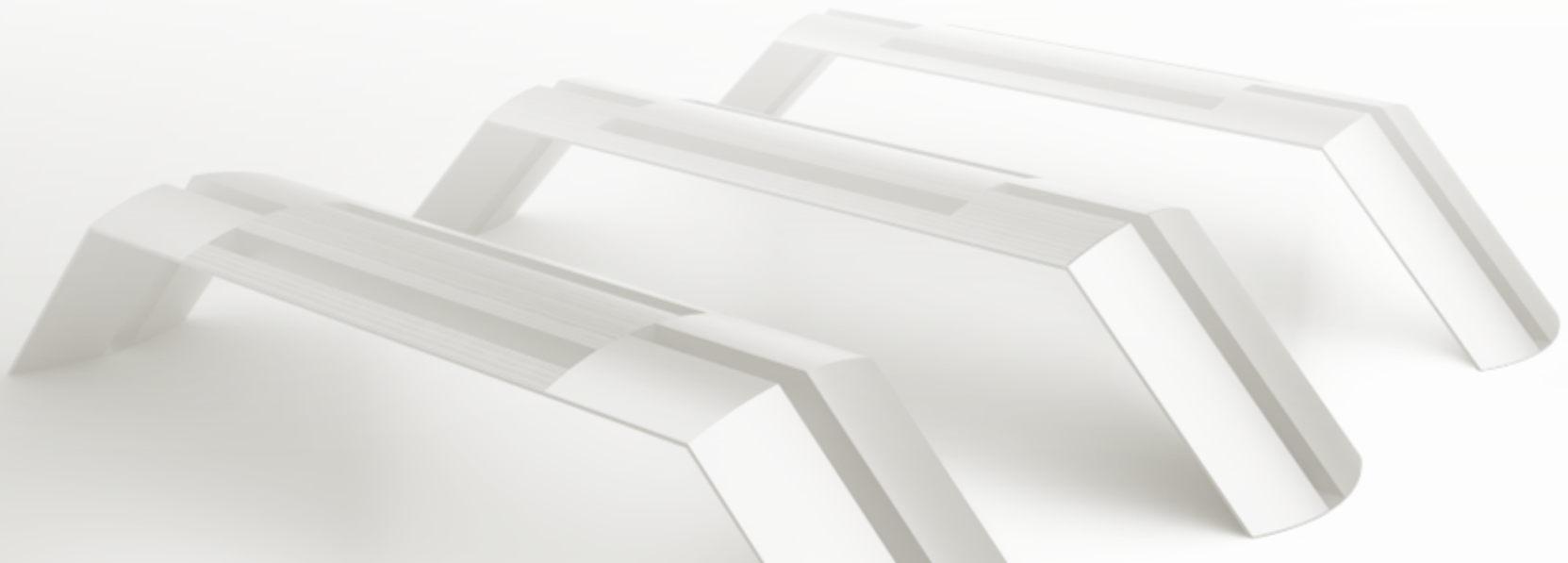
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INVESTMENTS IN EDUCATION DEVELOPMENT

Design of nontraditional street furniture sitting element

PART ONE - ANALYSIS



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CATEGORIES OF STREET FURNITURE SITTING ELEMENTS

products

- **Common elements** - characterized by offering options and type lines (bench with backrest, no backrest, different color or material type). The priority is value of element.
- **Original elements** - usually conceived of objects individually focused on the visual aspect that can be categorized as:
 - Sculptural elements and environmental objects
 - Nontraditional materials or design solutions
 - Elements that combine multiple functions

custom

- **Competition designs, visions, temporary installations, original designs**

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Common elements



Radium, steel, wood
David Karásek, Radek Hegmon



Radium, steel, plastic
David Karásek, Radek Hegmon



Radium, steel
David Karásek, Radek Hegmon



NeoRomántico, aluminium
Miguel Milá



NeoRomántico, aluminium, wood
Miguel Milá



NeoRomántico, steel, wood
Miguel Milá

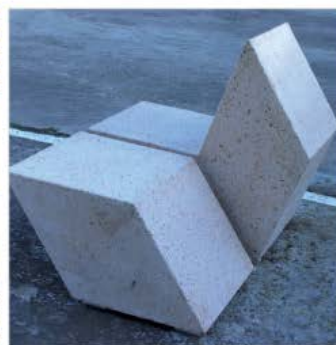
Nontraditional materials or design solutions



Finferlo, steel, plastic
Mitzi Bollani



Rio, liquid stone (UHPC)
André Lompreta



108, cast stone
Enric Batlle, Joan Roig



Blow up, cast stone
Mansilla + Tuñón



Trapecio, steel, wood
Antonio Montes, Montse Periel



BdLove Bench, polyethylene
Ross Lovegrove



G Banco / G Silla, steel, wood
A. Arriola & C. Fiol



Bagdad Café, Corten
Helio Piñón

Elements that combine multiple functions



Hydra, cast stone
Ángels Colom



Woody, steel, wood
David Karásek, Radek Hegmon



INTEGRAL, steel, wood
Ondřej Elfmark



STRIP EASE, steel
Lana+Savettiere



Round-B, steel, wood
Mv Design



Godot, cast stone
diez+diez diseño



Sinus, steel
Roman Vrtiška



Trasluz, steel, wood
Francisco J. Mangado

Sculptural elements and environmental objects



Flor, beton
Mansilla + Tuñón



Boomerang, beton
Arriola&Fiol, arquitectes



Naguisa, beton
Toyo Ito



Xurret System, cast stone
Iñaki Abalos / Juan Herreros



Slope, cast stone
Pich-Aguilera, arquitectes



[K-BENCH], polypropylene
Charles Kaisin



Muscle, steel
Alexandre Moronnoz



Urban Adapter, wood, steel
rocker-lange architects

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Competition designs, visions, temporary installations, original designs



City Lounge, St. Gallen
Carlos Martinez, Pipilotti Rist



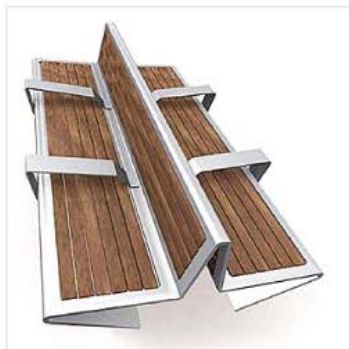
TOČ-MĚ-TOČ
Jaroslav Jerhot



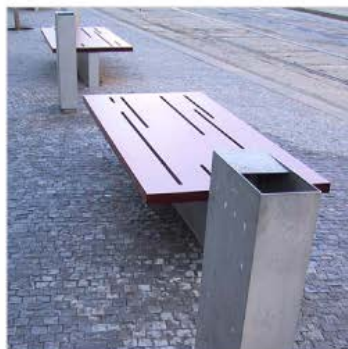
Městské odpočívadlo
Štěpán Eliáš & Josef Hajný



Snake
Roman Vrtilka



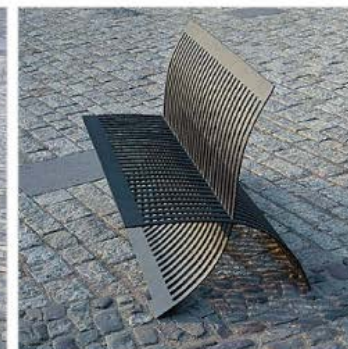
Astral Benches ver. 2
Astral media outdoor



Pedestrian Zone Anděl, Praha
D3A architekti



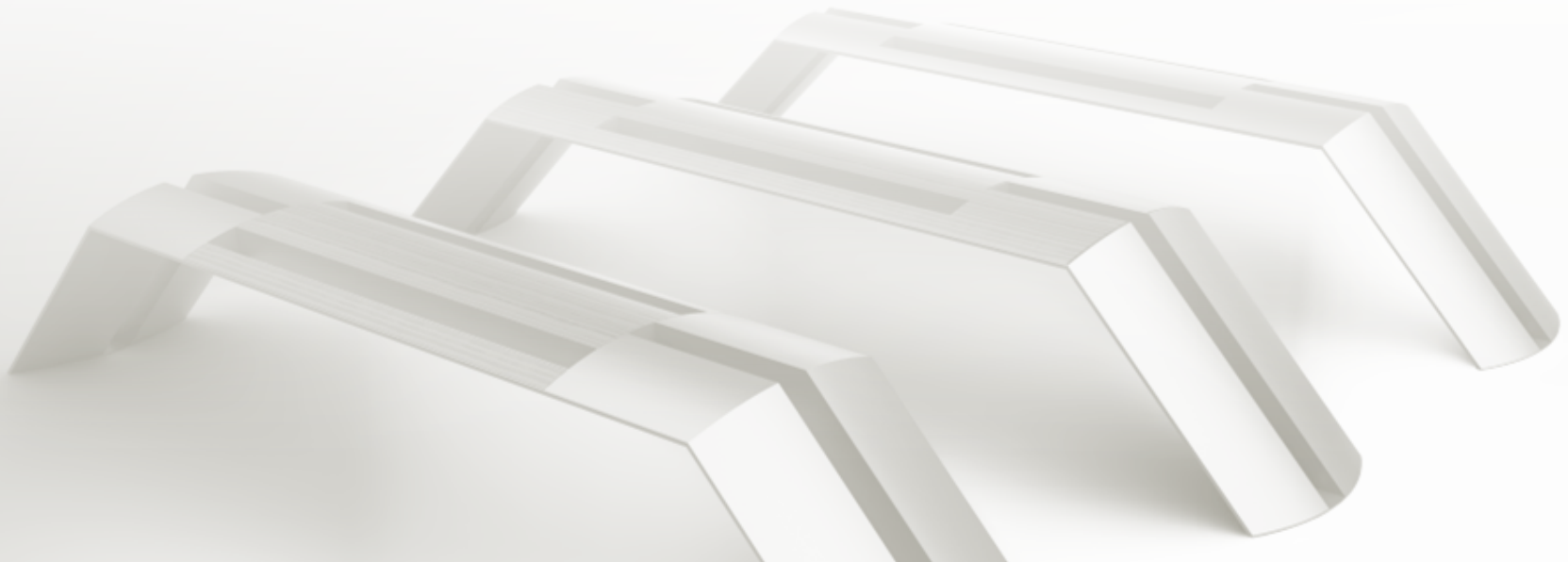
Horní náměstí v Olomouci
HŠH architekti



Jiřské náměstí v Praze
HŠH architekti

Design of nontraditional street furniture sitting element

PART TWO – SELECTED PROBLEMS



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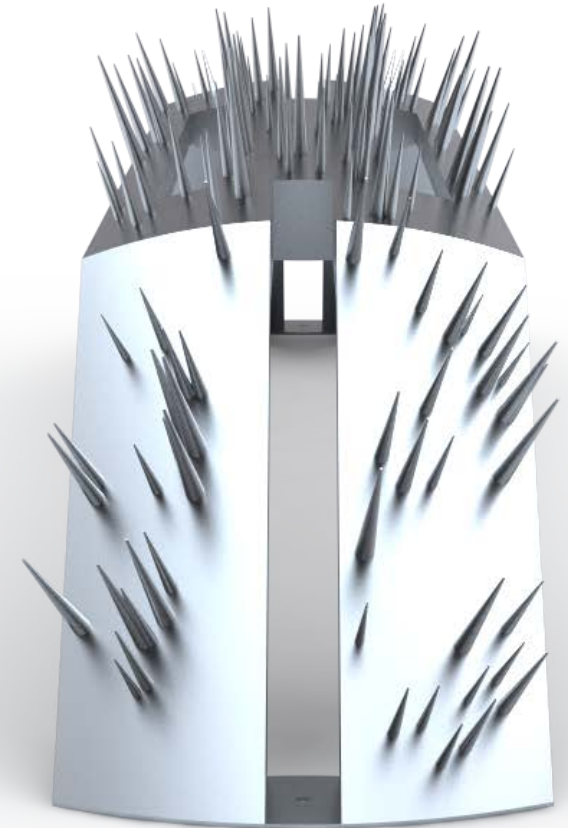
INVESTMENTS IN EDUCATION DEVELOPMENT

ANTI-ERGONOMICS

Public space has its own specifics due to the anonymity of its users, therefore it is necessary that the elements of street furniture have been designed with certain characteristics that are inconsistent with the ergonomics.

Aim:

- Restrictions on the use of elements for purposes other than designed.
- Restrictions on transfer element or stealing protection.



ANTI-ERGONOMICS

Restrictions on the use of elements for purposes other than designed

DESIGNER

- Special construction in the element
- Sitting surface
- Size/length of the element
- Geometry of the element

ARCHITECT

- Selection of the element type
- Element location

ANTI-ERGONOMICS

Special construction in the element



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ANTI-ERGONOMICS

Sitting surface



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ANTI-ERGONOMICS

Size/length of the element



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ANTI-ERGONOMIE

Geometry of the element



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ANTI-ERGONOMICS

Restrictions on transfer element or stealing protection

DESIGNER

- Weight and geometry of element
- System of element anchoring

ARCHITECT

- Element location
- Selecting the element type
- Quality of element anchoring

ANTI-ERGONOMIE

Restrictions on transfer element or stealing protection

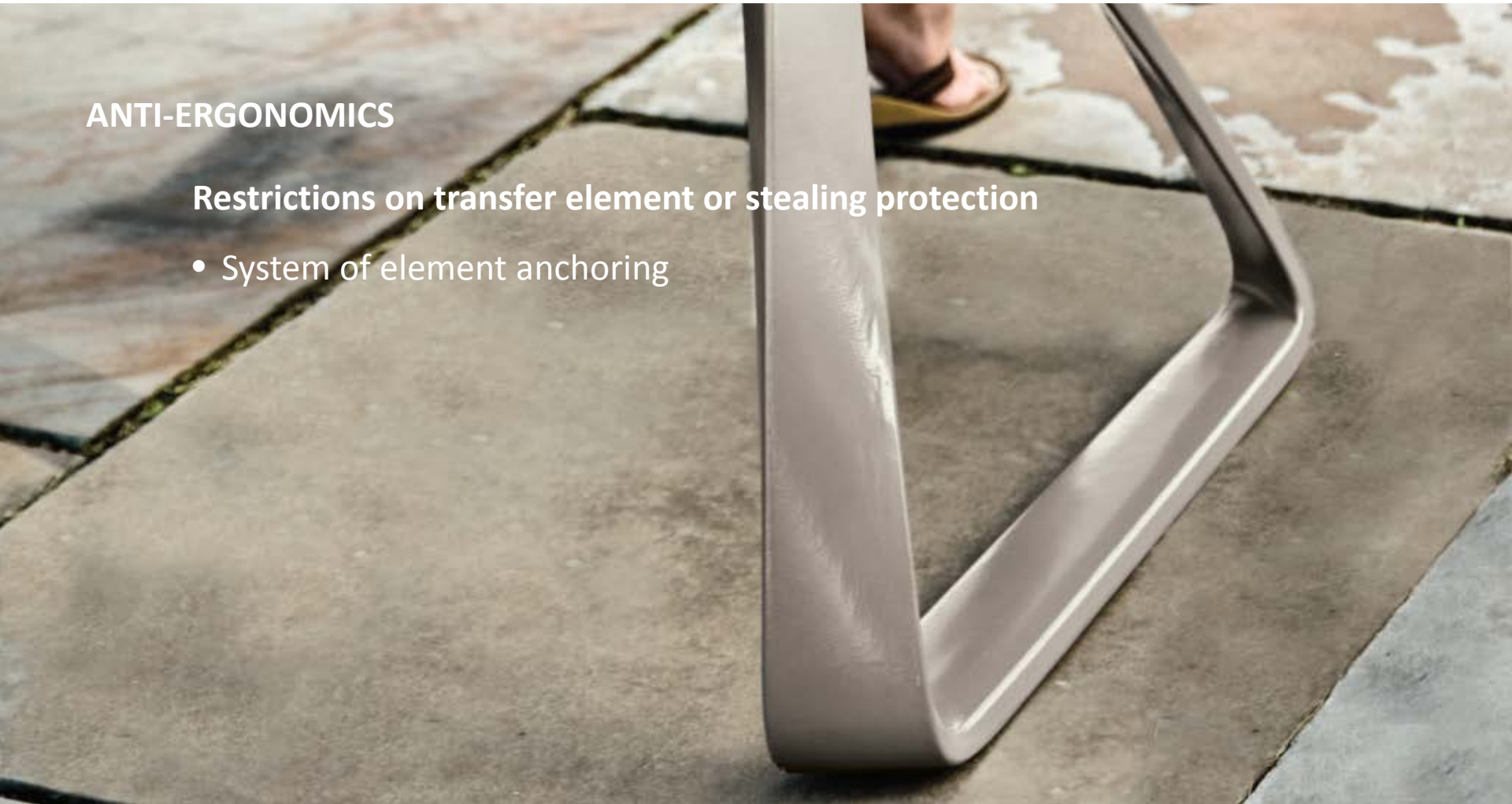
- Weight and geometry of element



ANTI-ERGONOMICS

Restrictions on transfer element or stealing protection

- System of element anchoring

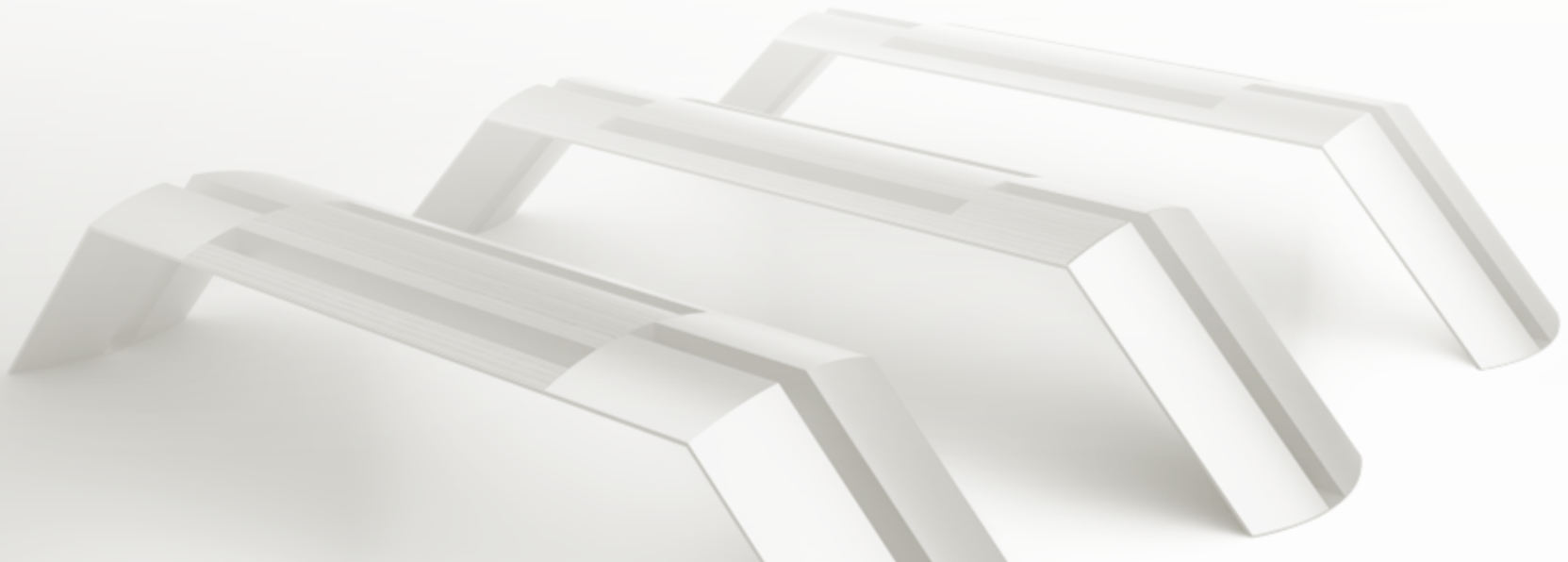


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Design of nontraditional street furniture sitting element

PART THREE POINT FIVE – TURN-OFF



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STABILITY ELEMENT

Types of elements by stability:

- 1) The element is sufficiently stable and fixed, so no need to further anchoring.
- 2) The element is stable, but not sufficiently to handling. The anchoring is necessary due to fixation of its position.
- 3) The element itself is not stable or is unstable under load, so it must be anchored to ensure its stability and load resulted from use.



COMMON USED ANCHORING OF STREET FURNITURE

No anchoring

+ Free space

- Vandalism

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COMMON USED ANCHORING OF STREET FURNITURE

Anchoring into the pavement

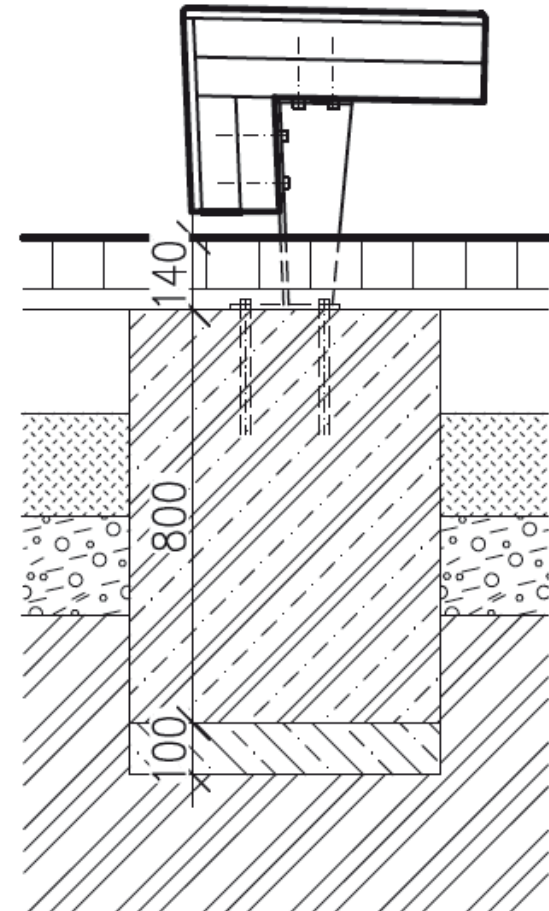
- + Cheap
- + Easy
- + Does not affect the underground
- According to the type of pavement might be less stable

COMMON USED ANCHORING OF STREET FURNITURE

Anchoring to the basement

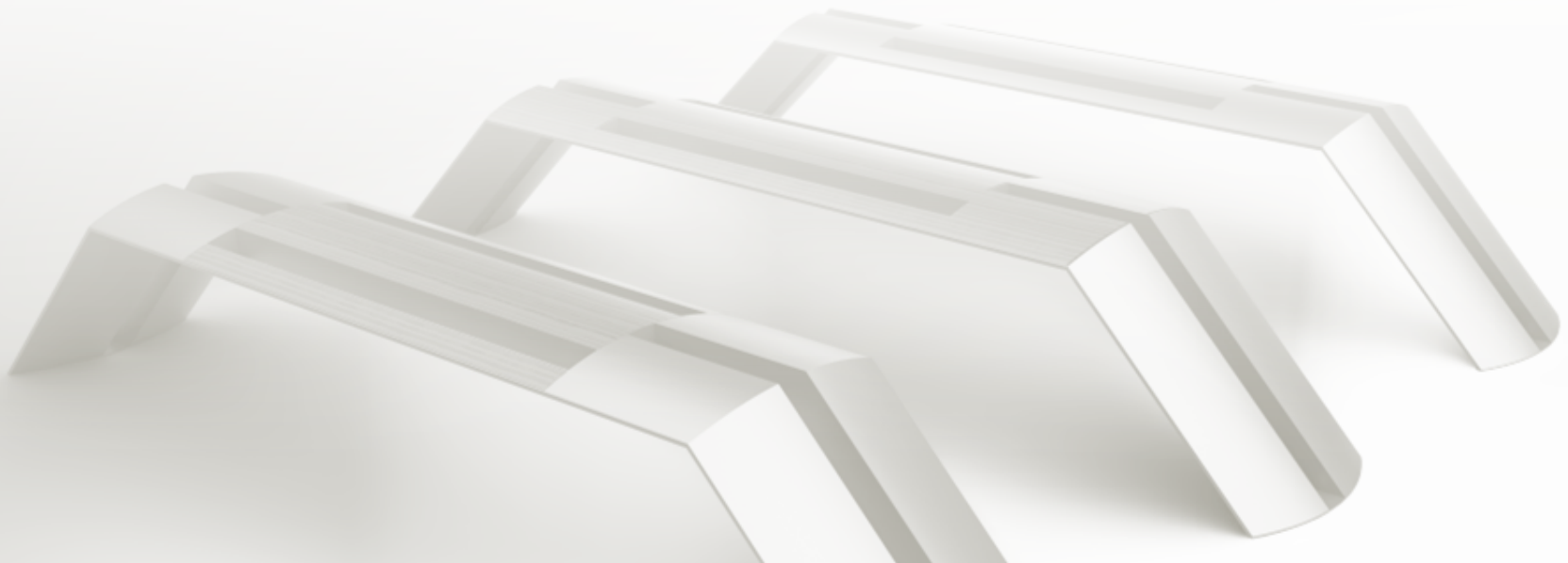
It is required for elements that create bending momentum in anchoring place.

- + Very robust, stable
- Interferes with the subsoil
- Expensive



Design of nontraditional street furniture sitting element

PART THREE - CONCLUSION



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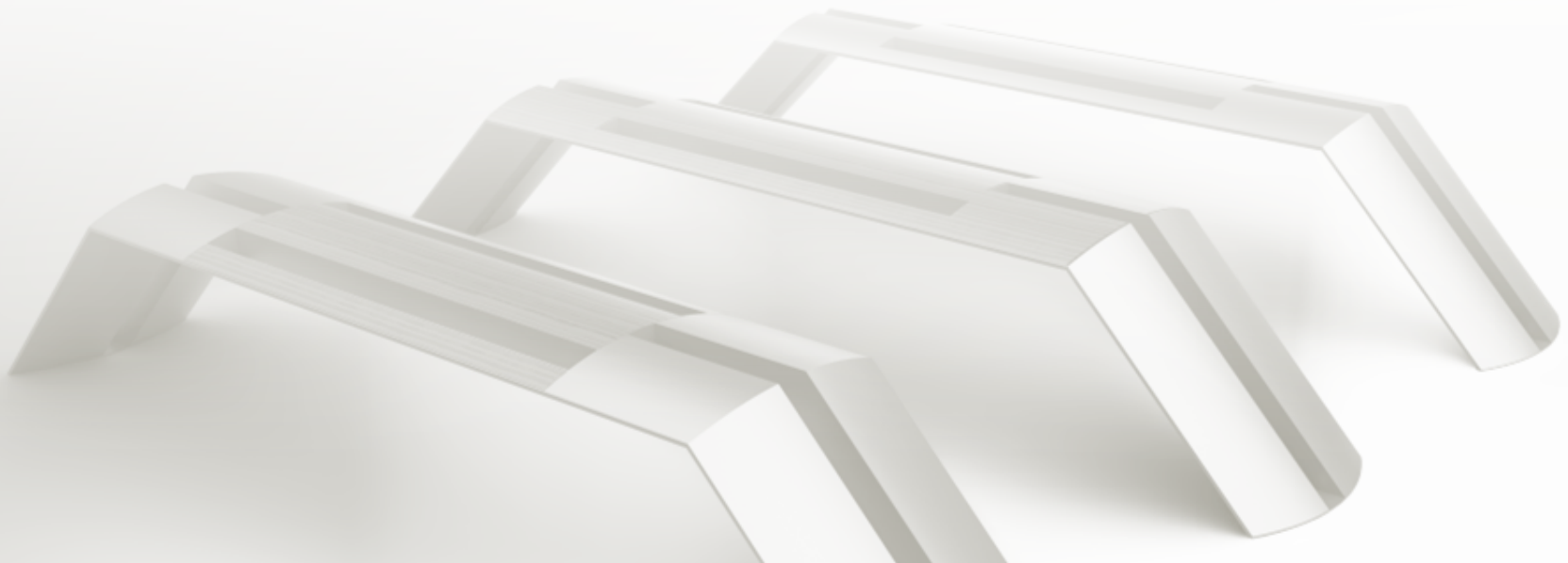
INVESTMENTS IN EDUCATION DEVELOPMENT

DEFINITION OF THE OWN DESIGN ELEMENT

- Modern design in compliance with the tectonics of individual components.
- Use (for this type of element) of innovative structural design and materials to distinguish elements of normal production and indicates possible future trends.
- A combination of two functions that are normally provided by a variety of street furniture elements while still exists sitting used as a single function.
- Targeted use of anti-ergonomic principles to reduce the use of unwanted element.
- Design of innovative "system" solution for anchoring element, which will eliminate the disadvantages of commonly used solutions.

Design of nontraditional street furniture sitting element

PART FOUR - SOLUTIONS



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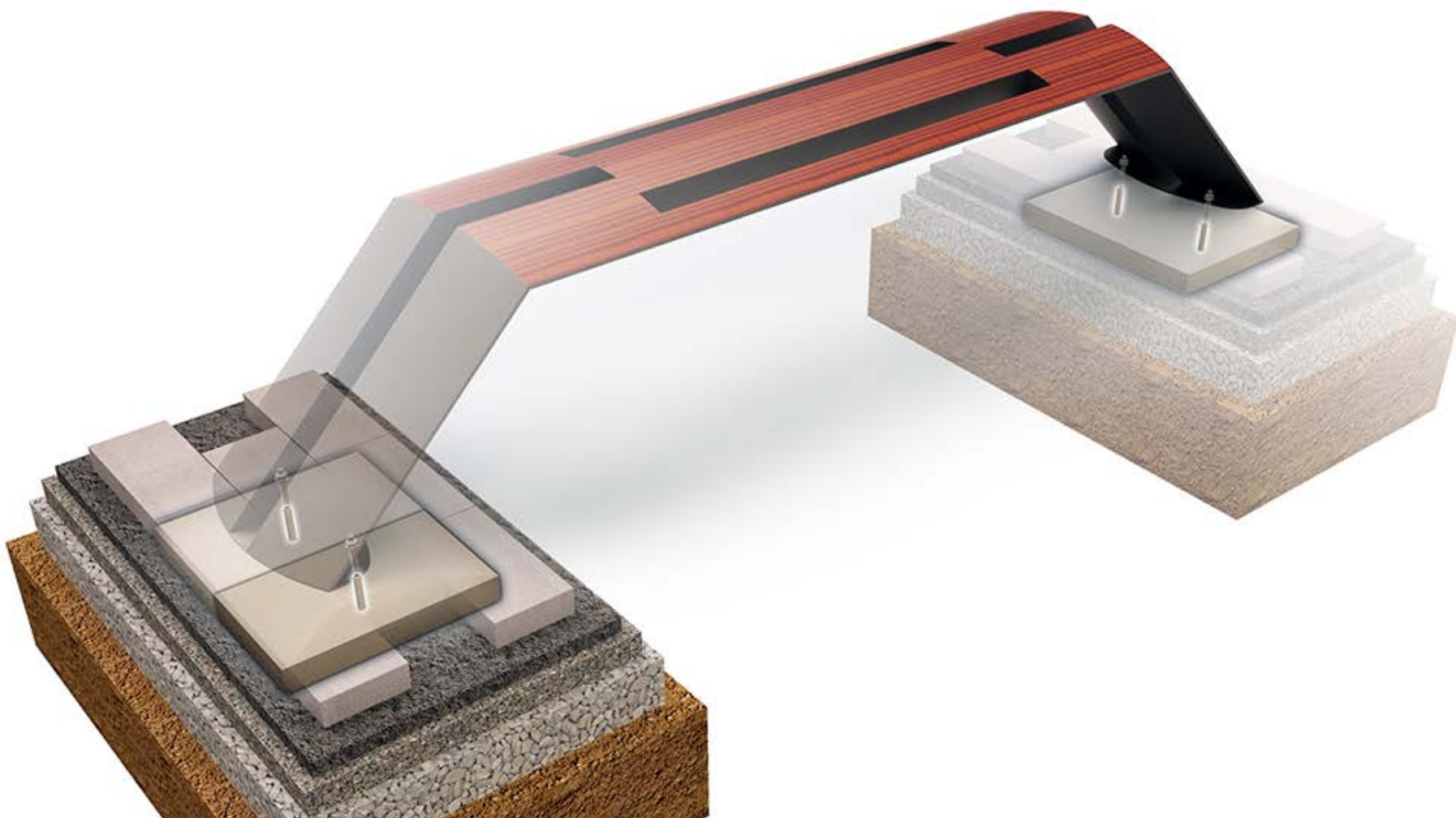


Design of nontraditional street furniture sitting element

Vladimír Haltof

SLIDE NR.

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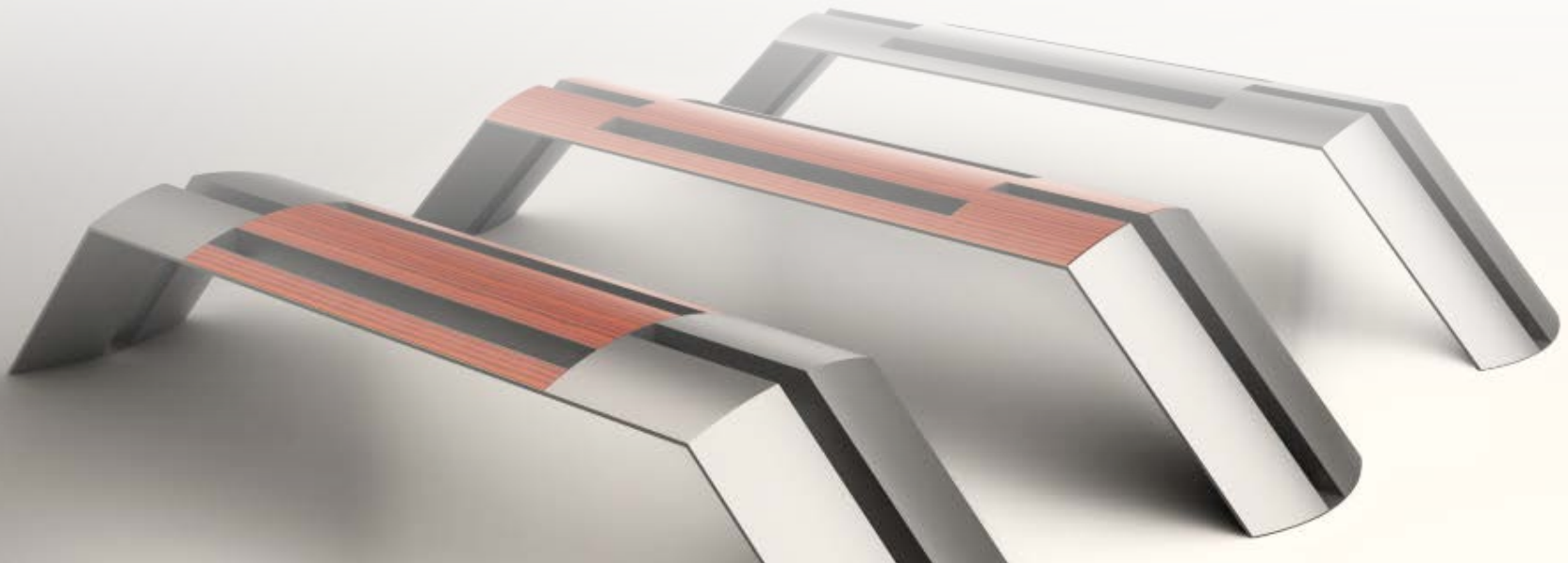


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INVESTMENTS IN EDUCATION DEVELOPMENT

Thank you for your attention.



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