

Provider integration requirements

Introduction

The Material Reuse Portal is designed to bring together data on available materials from multiple sources. We integrate with circular economy marketplaces and provide a simple way for providers to be listed on the site.

Technical requirements

Each provider should provide one of the following methods of integration:

1. REST API endpoint for consuming the listings (recommended)
 - REST API endpoint for consuming all categories (optional)
2. Flat file

In terms of data requirements, our `Product` (listing) entity consists of the following properties:

Constraint	Name	Data type	Description
REQUIRED	Unique identifier	uuid / string	A unique identifier for your listing
REQUIRED	Name	string	The title or name of your listing
REQUIRED	URL	string	<p>The URL of the listing on the provider's end, used for redirecting users</p> <p>+ If your service requires users to log in before viewing a listing, it is advisable that users coming from our portal are excluded to offer a better user experience.</p> <p>You can identify users coming from our portal by parsing the <code>source</code> query string in the URL.</p> <p>e.g. <code>example.com/listing/123e4567?source=domain.com</code></p>
REQUIRED	Description	string	Details about the listing
REQUIRED	Date available	string (ISO-8601)	The date that the listing became available (or was posted) on the provider platform
OPTIONAL	Mass	decimal	The weight of the product, if applicable
OPTIONAL	Category	list / string	The category or categories associated with the listing
OPTIONAL	Size	string	Product dimensions or number of units (varies per product type)
REQUIRED	Is hazardous	boolean	Whether the product is hazardous or not
OPTIONAL	Transport requirements	string	Any transport requirements users should be aware of
REQUIRED	Can be delivered	boolean	Whether delivery services are available or not
REQUIRED	Quantity	numeric	The quantity available
OPTIONAL	Quantity type	string	Quantity unit, if applicable
OPTIONAL	Composition	string	Main materials used, if applicable
OPTIONAL	Function	string	Function / current application, if applicable
REQUIRED	Expected value	numeric	Expected value / cost of the product
REQUIRED	Allocation	string or list	Who can collect the product, e.g. companies, individuals, charities
REQUIRED	Is reclaimed	boolean	Material is salvaged/reclaimed rather than surplus or new stock

REQUIRED	Location	string or object	<p>A locality (city / town) is mandatory when location filters are applied. Full address can also be provided that it needs to be an object.</p> <p>For example</p> <pre> 1 { 2 "location": { 3 "addressLine1": "", 4 "addressLine2": "", 5 "locality": "", 6 "postcode": "" 7 } 8 }</pre>
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Providers' endpoints should ideally allow fetching all listings at once. If that's not possible to due technical or performance issues, a reasonable page size should be allowed. Our platform will consume the provider's endpoint at regular intervals.

Our `Category` entity consists of the following properties:

Constraint	Name	Data type	Description
REQUIRED	Unique identifier	uuid / string	A unique identifier for your category
REQUIRED	Name	string	The title or name of your category
OPTIONAL	Description	string	Short description of the category